

**“STATE OF WASHINGTON”
BOILERS
AND
UNFIRED PRESSURE VESSEL
LAWS**

**CHAPTER 296-104 WAC
CHAPTER 70.79 RCW**

**DEPARTMENT OF LABOR AND INDUSTRIES
DIVISION OF SPECIALTY COMPLIANCE SERVICES
BOILER/UNFIRED PRESSURE VESSEL SECTION**



08/2006

DISCLAIMER STATEMENT

This document contains revised code of Washington laws and Washington Administrative Code rules, which are current as of the date on the cover. Changes may have occurred since the date of print, in subsequent legislative sessions and administrative rule hearings that may dramatically changed a law or rule. You are encouraged to research the most current language of RCW laws and WAC rules. You will find this at:
www.lni.wa.gov/tradeslicensing/boilers.

The Washington Board of Boiler Rules

The **Board of Boiler Rules** consists of five members appointed by the governor. The board's job is to formulate definitions, rules and regulations for the safe and proper construction, installation, repair, use and operation of boilers and the repair of unfired pressure vessels in this state.

Craig Hopkins, PE, Chair
Mechanical Engineer's Rep
500 South Myrtle Street
Seattle, WA 98108
206-762-0737
E-mail:
chopkins@seattleboiler.com

Steven Bacon
Owner/User's Rep
PO Box 8
Ferndale, WA 98248
360-384-8238
E-mail:
Steve.E.Bacon@ConocoPhillips.com

Faye Dietz
Manufacturer's Rep
1133 California Way
Longview WA 98632
360-425-8600
E-mail: fdietz@wayron.com

Kenneth Eshleman
Insurance Company's Rep
21506 12th Avenue W
Lynnwood WA 98036
425-754-6745
E-mail: kenneth_eshleman@hsb.com

Linda Williamson (Secretary)
Chief Boiler/Pressure Vessel
Inspector
PO Box 44410
Olympia WA 98504-4410
Phone: 360-902-5270
Cell: 360-280-4228
Fax: 360-902-5292
E-mail: wiln235@lni.wa.gov

Steve Prideaux
Boilermaker/Operator's Rep
407 14th Ave SE
Puyallup, WA 98371-0192
Phone: 253-697-1726
Fax: 253-697-5127
E-mail: stevenprideaux@goodsamhealth.org

CENTRAL OFFICE STAFF



Mailing address:

Department of Labor and Industries
Boiler/Unfired Pressure Vessel Section
PO Box 44410
Olympia WA 98504-4410

Physical Address:

7273 Linderson Way SW
Tumwater, WA 98501

Contact the following for general information:

Bobbe Hundley, Secretary Administrative
Phone: 360-902-5271
E-mail: hunb235@Lni.wa.gov

Contact the following for billing and certification information:

Karol Conly, Customer Service Specialist 3 (Supervisor)
Phone: 360-902-5273
E-mail: conk235@Lni.wa.gov

Kay Piesch, Customer Service Specialist 2
Phone: 360-902-5272
E-mail: piek235@Lni.wa.gov

Annabel Schmidt, Customer Service Specialist 2
Phone: 360-902-5267
E-mail: schc235@Lni.wa.gov

BOILER INSPECTORS



L&I Boiler Inspectors

Northwest Washington

Whatcom County
Skagit County
San Juan County
Island County
Snohomish County (north of 530)

Linda Williamson, Inspector 2
1720 Ellis Street, Suite 200
Bellingham WA 98225
Phone: (360) 647-7317
Cell: (360) 815-0446
Fax: (360) 647-7310
E-mail WILN235@LNI.wa.gov

North King County (north of I-90)
Snohomish County (south of 530)

Mike Carlson, Inspector 1
729 100th Street SE
Everett, WA 98208
Phone: (425) 290-1345
Cell: (425) 754-0845
Fax: (425) 290-1399
E-Mail CAMX235@LNI.wa.gov

South King County
(See also [City of Seattle inspectors.](#))

Tim Swanson, Inspector 2
12806 Gateway Drive
Tukwila WA 98168-3346
Phone: (206) 835-1066
Cell: (206) 953-3777
Fax: (206) 835-1066
E-mail SWAV235@LNI.wa.gov

Western Washington (Central)

Pierce County
Kitsap County
Jefferson County
Clallam County

Karen Boyd, Inspector 2
950 Broadway, Suite 200
Tacoma, WA 98402-4453
Phone: (253) 596-3802
Cell: (253) 377-9387
Fax: (253) 596-3956
E-Mail BOYD235@LNI.wa.gov

Tacoma

Jerry Shiflett, Inspector 1
950 Broadway Suite 200
Tacoma WA 98402-4453
Phone: (253) 596-3902
Cell: (253) 377-6767
Fax: (253) 596-3956
E-mail SHIJ235@LNI.wa.gov

Southwest Washington

L&I main office - Olympia/Tumwater

Linda Williamson, Chief Boiler/Pressure
Vessel Inspector
Mailing address:
PO Box 44410
Olympia WA 98504-4410
Physical Address:
7273 Linderson Way SW
Tumwater, WA 98501
Phone: (360) 902-5270
Cell: (360) 280-4228
Fax: (360) 902-5292
E-Mail WILN235@LNI.wa.gov

Tony Oda, Inspector 3 (Technical
Specialist))
Mailing address:
PO Box 44410
Olympia WA 98504-4410
Physical Address:
7273 Linderson Way SW
Tumwater, WA 98501
Phone: (360) 902-5271
Cell: (360) 561-8441
Fax: (360) 902-5292
E-Mail ODAA235@LNI.wa.gov

	Chris Davies, Inspector 1 7273 Linderson Way SW Tumwater, WA 98501 Phone: (360) 902-5475 Cell: (360) 239-4809 Fax: (360) 902-5810 E-mail DAVX235@lni.wa.gov
Pacific County Lewis County Wahkiakum County Cowlitz County Skamania County Clark County	Dave Sumpter, Inspector 2 312 SE Stonemill Drive, Suite 120 Vancouver, WA 98684-6982 Phone: (360) 896-2359 Cell: (360) 772-0157 Fax: (360) 896-2345 E-mail SUMD235@LNI.wa.gov
North Central Washington	
Okanogan County Chelan County Douglas County Spokane County Grant County (north of I-90)	Don Cummings, Inspector 2 North 901 Monroe, Suite 100 Spokane WA 99201-2148 Phone: (509) 324-2567 Cell: (509) 981-4650 Pager: (509) 459-9985 Fax: (509) 324-2618 E-mail CUMD235@LNI.wa.gov
South Central Washington	
Klickitat County Yakima County Kittitas County Benton County Grant County (south of I-90) Adams County (south of I-90 and west of 395) Franklin County (west of 395)	Dan Brown, Inspector 1 4310 West 24th Avenue Kennewick WA 99338 Phone: (509) 735-0118 Cell: (509) 539-3372 Fax: (509) 735-0102 E-mail BRDN235@lni.wa.gov
Eastern Washington	
Ferry County, Stevens County, Pend Oreille County, Lincoln County, Whitman County, Asotin County, Garfield County, Columbia County, Spokane County, Walla Walla County Franklin County (east of 395), Adams County (east of 395 & north of I-90) (See also City of Spokane inspectors.)	Stuart Anderson, Inspector 1 North 901 Monroe, Suite 100 Spokane WA 99201-2148 Phone: (509) 324-2564 Cell: (509) 209-1617 Fax: (509) 324-2618 E-mail ASTU235@lni.wa.gov

--	--

Other Jurisdictions	
Seattle, City of	Larry Leet Boiler/Pressure Systems Inspector/Chief 700 5th Avenue, Suite 2100 PO Box 34019 Seattle, WA 98124-4019 Phone: (206) 684-8459 Fax: (206) 386-4039 E-mail: Larry.Leet@ci.seattle.wa.us www.ci.seattle.wa.us Operator Exam Requests: (206) 684-5174
Spokane, City of	Ed Kimbrel Boiler/Pressure Vessel Chief Inspector Dept. of Code Enforcement 808 W Spokane Falls Blvd. Spokane, WA 99201-3343 Phone: (509) 625-6313 FAX: (509) 625-6124 E-mail: EKimbrel@spokanecity.org

CHAPTER 70.79 RCW

BOILERS AND UNFIRED PRESSURE VESSELS

Sections

<u>70.79.010</u>	Board of boiler rules--Members--Terms--Meetings.
<u>70.79.020</u>	Compensation and travel expenses.
<u>70.79.030</u>	Duties of board.
<u>70.79.040</u>	Rules and regulations--Scope.
<u>70.79.050</u>	Rules and regulations--Effect.
<u>70.79.060</u>	Construction, installation must conform to rules--Special installation and operating permits.
<u>70.79.070</u>	Existing installations--Conformance required--Miniature hobby boilers.
<u>70.79.080</u>	Exemptions from chapter.
<u>70.79.090</u>	Exemptions from certain provisions.
<u>70.79.095</u>	Espresso machines--Local regulation prohibited.
<u>70.79.100</u>	Chief inspector--Qualifications--Appointment, removal.
<u>70.79.110</u>	Chief inspector--Duties in general.
<u>70.79.120</u>	Deputy inspectors--Qualifications--Employment.
<u>70.79.130</u>	Special inspectors--Qualifications--Commission.
<u>70.79.140</u>	Special inspectors--Compensation--Continuance of commission.
<u>70.79.150</u>	Special inspectors--Inspections--Exempts from inspection fees.
<u>70.79.160</u>	Report of inspection by special inspector--Filing.
<u>70.79.170</u>	Examinations for inspector's appointment or commission--Reexamination.
<u>70.79.180</u>	Suspension, revocation of inspector's commission--Grounds--Reinstatement.
<u>70.79.190</u>	Suspension, revocation of commission--Appeal.
<u>70.79.200</u>	Lost or destroyed certificate or commission.
<u>70.79.210</u>	Inspectors--Performance bond required.
<u>70.79.220</u>	Inspections--Who shall make.
<u>70.79.230</u>	Access to premises by inspectors.

<u>70.79.240</u>	Inspection of boilers, unfired pressure vessels--Scope--Frequency.
<u>70.79.250</u>	Inspection--Frequency--Grace period.
<u>70.79.260</u>	Inspection--Frequency--Modification by rules.
<u>70.79.270</u>	Hydrostatic test.
<u>70.79.280</u>	Inspection during construction.
<u>70.79.290</u>	Inspection certificate--Contents--Posting--Fee.
<u>70.79.300</u>	Inspection certificate invalid on termination of insurance.
<u>70.79.310</u>	Inspection certificate--Suspension--Reinstatement.
<u>70.79.320</u>	Operating without inspection certificate prohibited--Penalty.
<u>70.79.330</u>	Inspection fees--Expenses--Schedules.
<u>70.79.350</u>	Inspection fees--Receipts for--Pressure systems safety fund.
<u>70.79.361</u>	Board determinations--Appeals.
<u>70.79.900</u>	Severability--1951 c 32.

NOTES:

Excessive steam in boilers, penalty: RCW 70.54.080.

State building code: Chapter 19.27 RCW.

RCW 70.79.010 Board of boiler rules--Members--Terms--Meetings. There is hereby created within this state a board of boiler rules, which shall hereafter be referred to as the board, consisting of five members who shall be appointed to the board by the governor, one for a term of one year, one for a term of two years, one for a term of three years, and two for a term of four years. At the expiration of their respective terms of office, they, or their successors identifiable with the same interests respectively as hereinafter provided, shall be appointed for terms of four years each. The governor may at any time remove any member of the board for inefficiency or neglect of duty in office. Upon the death or incapacity of any member the governor shall fill the vacancy for the remainder of the vacated term with a representative of the same interests with which his or her predecessor was identified. Of these five appointed members, one shall be representative of owners and users of boilers and unfired pressure vessels within the state, one shall be representative of the boiler or unfired pressure vessel manufacturers within the state, one shall be a representative of a boiler insurance company licensed to do business within the state, one shall be a mechanical engineer on the faculty of a recognized engineering college or a graduate mechanical engineer having equivalent experience, and one shall be representative of the boilermakers, stationary operating engineers, or pressure vessel operators. The board shall elect one of its members to serve as chair and, at the call of the chair; the board shall meet at least four times each year at the state capitol or other place designated by the board. [1999 c 183 § 1; 1951 c 32 § 1.]

RCW 70.79.020 Compensation and travel expenses. The members of the board shall be compensated in accordance with RCW 43.03.240 and shall receive travel expenses incurred while in the performance of their duties as members of the board, in accordance with RCW 43.03.050 and 43.03.060. [1984 c 287 § 105; 1975-'76 2nd ex.s. c 34 § 159; 1951 c 32 § 2.]

NOTES:

Legislative findings--Severability--Effective date--1984 c 287: See notes following RCW 43.03.220.

Effective date--Severability--1975-'76 2nd ex.s. c 34: See notes following RCW 2.08.115.

RCW 70.79.030 Duties of board. The board shall formulate definitions and rules for the safe and proper construction, installation, repair, use, and operation of boilers and for the safe and proper construction, installation, and repair of unfired pressure vessels in this state. The definitions and rules so formulated shall be based upon, and, at all times, follow the nationally or internationally accepted engineering standards, formulae, and practices established and pertaining to boiler and unfired pressure vessel construction and safety, and the board may by resolution adopt existing published codifications thereof, and when so adopted the same shall be deemed incorporated into, and to constitute a part or the whole of the definitions and rules of the board. Amendments and interpretations to the code shall be enforceable immediately upon being adopted, to the end that the definitions and rules shall at all times follow nationally or internationally accepted engineering standards. However, all rules adopted by the board shall be adopted in compliance with the Administrative Procedure Act, chapter 34.05 RCW, as now or hereafter amended. [1999 c 183 § 2; 1972 ex.s. c 86 § 1; 1951 c 32 § 3.]

RCW 70.79.040 Rules and regulations--Scope. The board shall promulgate rules and regulations for the safe and proper installation, repair, use and operation of boilers, and for the safe and proper installation and repair of unfired pressure vessels which were in use or installed ready for use in this state prior to the date upon which the first rules and regulations under this chapter pertaining to existing installations became effective, or during the twelve months period immediately thereafter. [1951 c 32 § 4.]

RCW 70.79.050 Rules and regulations--Effect. (1) The rules and regulations formulated by the board shall have the force and effect of law, except that the rules applying to the construction of new boilers and unfired pressure vessels shall not be construed to prevent the installation thereof until twelve months after their approval by the director of the department of labor and industries.

(2) Subsequent amendments to the rules and regulations adopted by the board shall be permissive immediately and shall become mandatory twelve months after such approval. [1951 c 32 § 5.]

RCW 70.79.060 Construction, installation must conform to rules--Special installation and operating permits. (1) Except as provided in subsection (2) of this section, no power boiler, low pressure boiler, or unfired pressure vessel which does not conform to the rules and regulations formulated by the board governing new construction and installation shall be installed and operated in this state after twelve months from the date upon which the first rules and regulations under this chapter pertaining to new construction and installation shall have become effective, unless the boiler or unfired pressure vessel is of special design or construction, and is not covered by the rules and regulations, nor is in any way inconsistent

with such rules and regulations, in which case a special installation and operating permit may at its discretion be granted by the board.

(2) A special permit may also be granted for boilers and pressure vessels manufactured before 1951 which do not comply with the code requirements of the American Society of Mechanical Engineers adopted under this chapter, if the boiler or pressure vessel is operated exclusively for the purposes of public exhibition, and the board finds, upon inspection, that operation of the boiler or pressure vessel for such purposes is not unsafe. [1984 c 93 § 1; 1951 c 32 § 6.]

RCW 70.79.070 Existing installations--Conformance required--Miniature hobby boilers. (1) All boilers and unfired pressure vessels which were in use, or installed ready for use in this state prior to the date upon which the first rules and regulations under this chapter pertaining to existing installations became effective, or during the twelve months period immediately thereafter, shall be made to conform to the rules and regulations of the board governing existing installations, and the formulae prescribed therein shall be used in determining the maximum allowable working pressure for such boilers and unfired pressure vessels.

(2) This chapter shall not be construed as in any way preventing the use or sale of boilers or unfired vessels as referred to in subsection (1) of this section, provided they have been made to conform to the rules and regulations of the board governing existing installations, and provided, further, they have not been found upon inspection to be in an unsafe condition.

(3) A special permit may also be granted for miniature hobby boilers that do not comply with the code requirements of the American society of mechanical engineers adopted under this chapter and do not exceed any of the following limits:

- (a) Sixteen inches inside diameter of the shell;
- (b) Twenty square feet of total heating surface;
- (c) Five cubic feet of gross volume of vessel; and

(d) One hundred fifty p.s.i.g. maximum allowable working pressure, and if the boiler is to be operated exclusively not for commercial or industrial use and the department of labor and industries finds, upon inspection, that operation of the boiler for such purposes is not unsafe. [1995 c 41 § 1; 1993 c 193 § 1; 1951 c 32 § 7.]

RCW 70.79.080 Exemptions from chapter. This chapter shall not apply to the following boilers, unfired pressure vessels and domestic hot water tanks:

(1) Boilers and unfired pressure vessels under federal regulation or operated by any railroad subject to the provisions of the interstate commerce act;

(2) Unfired pressure vessels meeting the requirements of the interstate commerce commission for shipment of liquids or gases under pressure;

(3) Air tanks located on vehicles operating under the rules of other state authorities and used for carrying passengers, or freight;

(4) Air tanks installed on the right of way of railroads and used directly in the operation of trains;

(5) Unfired pressure vessels having a volume of five cubic feet or less when not located in places of public assembly;

(6) Unfired pressure vessels designed for a pressure not exceeding fifteen pounds per square inch gauge;

(7) Tanks used in connection with heating water for domestic and/or residential purposes;

(8) Boilers and unfired pressure vessels in cities having ordinances which are enforced and which have requirements equal to or higher than those provided for under this chapter, covering the installation, operation, maintenance and inspection of boilers and unfired pressure vessels;

(9) Tanks containing water with no air cushion and no direct source of energy that operates at a temperature of one hundred thirty degrees Fahrenheit or less;

- (10) Electric boilers:
- (a) Having a tank volume of not more than one and one-half cubic feet;
 - (b) Having a maximum allowable working pressure of one hundred pounds per square inch or less, with a pressure relief system to prevent excess pressure; and
 - (c) If constructed after June 10, 1994, constructed to American society of mechanical engineers code, or approved or otherwise certified by a nationally recognized or recognized foreign testing laboratory or construction code, including but not limited to Underwriters Laboratories, Edison Testing Laboratory, or Istituto Superiore Per La Prevenzione E La Sicurezza Del Lavoro;
- (11) Electrical switchgear and control apparatus that have no external source of energy to maintain pressure and are located in restricted access areas under the control of an electric utility;
- (12) Regardless of location, unfired pressure vessels and hot water heaters less than one and one-half cubic feet (11.25 gallons) in volume with a safety valve setting of one hundred fifty pounds per square inch gauge (psig) or less, or less than six inches in diameter and less than five cubic feet (37.5 gallons) in volume with a safety valve set at any pressure, or less than fifteen psig containing substances other than steam, lethal substances, or liquids with low flash points. [2005 c 22 § 1; 1999 c 183 § 3; 1996 c 72 § 1; 1994 c 64 § 2; 1986 c 97 § 1; 1951 c 32 § 8.]

NOTES:

Finding--Intent--1994 c 64: See note following RCW 70.79.095.

RCW 70.79.090 Exemptions from certain provisions. The following boilers and unfired pressure vessels shall be exempt from the requirements of RCW 70.79.220 and 70.79.240 through 70.79.330:

- (1) Boilers or unfired pressure vessels located on farms and used solely for agricultural purposes;
- (2) Unfired pressure vessels that are part of fertilizer applicator rigs designed and used exclusively for fertilization in the conduct of agricultural operations;
- (3) Steam boilers used exclusively for heating purposes carrying a pressure of not more than fifteen pounds per square inch gauge and which are located in private residences or in apartment houses of less than six families;
- (4) Hot water heating boilers carrying a pressure of not more than thirty pounds per square inch and which are located in private residences or in apartment houses of less than six families;
- (5) Approved pressure vessels (hot water heaters, hot water storage tanks, hot water supply boilers, and hot water heating boilers listed by a nationally recognized testing agency), with approved safety devices including a pressure relief valve, with a nominal water containing capacity of one hundred twenty gallons or less having a heat input of two hundred thousand b.t.u.'s per hour or less, used for hot water supply at pressure of one hundred sixty pounds per square inch or less, and at temperatures of two hundred ten degrees Fahrenheit or less: PROVIDED, HOWEVER, That such pressure vessels are not installed in schools, child care centers, public and private hospitals, nursing and boarding homes, churches, public buildings owned or leased and maintained by the state or any political subdivision thereof, and assembly halls;
- (6) Unfired pressure vessels containing only water under pressure for domestic supply purposes, including those containing air, the compression of which serves only as a cushion or airlift pumping systems, when located in private residences or in apartment houses of less than six families, or in public water systems as defined in RCW 70.119.020;
- (7) Unfired pressure vessels containing liquefied petroleum gases. [2005 c 22 § 2; 1999 c 183 § 4; 1988 c 254 § 20; 1983 c 3 § 174; 1972 ex.s. c 86 § 2; 1951 c 32 § 9.]

RCW 70.79.095 Espresso machines--Local regulation prohibited. A county, city, or other political subdivision of the state may not enforce any law specifically regulating the manufacture, installation, operation, maintenance, or inspection of any electric boiler exempt from this chapter by RCW 70.79.080(10). [1994 c 64 § 3.]

NOTES:

Finding--Intent--1994 c 64: "The legislature finds that small low-pressure boilers are found in devices such as espresso coffee machines and cleaning equipment common throughout Washington state. Such systems present little threat to public health and safety. Government regulation of such systems could impose a substantial burden on many small businesses and provide minimal public benefit. It is therefore the intent of the legislature to exempt these boilers from regulation under chapter 70.79 RCW and similar laws adopted by local governments." [1994 c 64 § 1.]

RCW 70.79.100 Chief inspector--Qualifications--Appointment, removal. (1) Within sixty days after the effective date of this chapter, and at any time thereafter that the office of the chief inspector may become vacant, the director of the department of labor and industries shall appoint a chief inspector who shall have had at the time of such appointment not less than ten years practical experience in the construction, maintenance, repair, or operation of high pressure boilers and unfired pressure vessels, as a mechanical engineer, steam engineer, boilermaker, or boiler inspector, and who shall have passed the same kind of examination as that prescribed for deputy or special inspectors in RCW 70.79.170 to be chief inspector until his successor shall have been appointed and qualified. Such chief inspector may be removed for cause after due investigation by the board and its recommendation to the director of the department of labor and industries. [1951 c 32 § 10.]

RCW 70.79.110 Chief inspector--Duties in general. The chief inspector, if authorized by the director of the department of labor and industries is hereby charged, directed and empowered:

- (1) To cause the prosecution of all violators of the provisions of this chapter;
- (2) To issue, or to suspend, or revoke for cause, inspection certificates as provided for in RCW 70.79.290;
- (3) To take action necessary for the enforcement of the laws of the state governing the use of boilers and unfired pressure vessels and of the rules and regulations of the board;
- (4) To keep a complete record of the type, dimensions, maximum allowable working pressure, age, condition, location, and date of the last recorded internal inspection of all boilers and unfired pressure vessels to which this chapter applies;
- (5) To publish and distribute, among manufacturers and others requesting them, copies of the rules and regulations adopted by the board. [1951 c 32 § 11.]

RCW 70.79.120 Deputy inspectors--Qualifications--Employment. The director shall employ deputy inspectors who shall have had at time of appointment not less than five years practical experience in the construction, maintenance, repair, or operation of high pressure boilers and unfired pressure vessels as a mechanical engineer, steam engineer, boilermaker, or boiler inspector, and who shall have passed the examination provided for in RCW 70.79.170. [1994 c 164 § 27; 1951 c 32 § 12.]

RCW 70.79.130 Special inspectors--Qualifications--Commission. In addition to the deputy boiler inspectors authorized by RCW 70.79.120, the chief inspector shall, upon the request of any company authorized to insure against loss from explosion of boilers and unfired pressure vessels in this state, or upon the request of any company operating boilers or unfired

pressure vessels in this state, issue to any inspectors of said company commissions as special inspectors, provided that each such inspector before receiving his or her commission shall satisfactorily pass the examination provided for in RCW 70.79.170, or, in lieu of such examination, shall hold a certificate of competency as an inspector of boilers and unfired pressure vessels for a state that has a standard of examination substantially equal to that of this state or a certificate as an inspector of boilers and unfired pressure vessels from the national board of boiler and pressure vessel inspectors. A commission as a special inspector for a company operating boilers or unfired pressure vessels in this state shall be issued only if, in addition to meeting the requirements stated herein, the inspector is continuously employed by the company for the purpose of making inspections of boilers or unfired pressure vessels used, or to be used, by such company. [1999 c 183 § 5; 1951 c 32 § 13.]

RCW 70.79.140 Special inspectors--Compensation--Continuance of commission.

Special inspectors shall receive no salary from, nor shall any of their expenses be paid by the state, and the continuance of a special inspector's commission shall be conditioned upon his or her continuing in the employ of a boiler insurance company duly authorized as aforesaid or upon continuing in the employ of a company operating boilers or unfired pressure vessels in this state and upon his or her maintenance of the standards imposed by this chapter. [1999 c 183 § 6; 1951 c 32 § 14.]

RCW 70.79.150 Special inspectors--Inspections--Exempts from inspection fees.

Special inspectors shall inspect all boilers and unfired pressure vessels insured or operated by their respective companies and, when so inspected, the owners and users of such insured boilers and unfired pressure vessels shall be exempt from the payment to the state of the inspection fees as provided for in RCW 70.79.330. [1999 c 183 § 7; 1951 c 32 § 15.]

RCW 70.79.160 Report of inspection by special inspector--Filing.

Each company employing special inspectors shall, within thirty days following each internal or external boiler or unfired pressure vessel inspection made by such inspectors, file a report of such inspection with the chief inspector upon appropriate forms. [2005 c 22 § 3; 1999 c 183 § 8; 1951 c 32 § 16.]

RCW 70.79.170 Examinations for inspector's appointment or commission--

Reexamination. Examinations for deputy or special inspectors shall be in writing and shall be held by the chief and a member of the board, or by at least two national board commissioned inspectors. Such examinations shall be confined to questions the answers to which will aid in determining the fitness and competency of the applicant for the intended service. In case an applicant for an inspector's appointment or commission fails to pass the examination, he may appeal to the board for another examination which shall be given by the chief within ninety days. The record of an applicant's examination shall be accessible to said applicant and his employer. [2005 c 22 § 7; 1951 c 32 § 18.]

RCW 70.79.180 Suspension, revocation of inspector's commission--Grounds--

Reinstatement. A commission may be suspended or revoked after due investigation and recommendation by the board to the director of the department of labor and industries for the incompetence or untrustworthiness of the holder thereof, or for willful falsification of any matter or statement contained in his application or in a report of any inspection. A person whose commission has been suspended or revoked, except for untrustworthiness, shall be entitled to apply to the board for reinstatement or, in the case of a revocation, for a new examination and commission after ninety days from such revocation. [1951 c 32 § 19.]

RCW 70.79.190 Suspension, revocation of commission--Appeal. A person whose commission has been suspended or revoked shall be entitled to an appeal as provided in RCW 70.79.361 and to be present in person and/or represented by counsel on the hearing of the appeal. [2005 c 22 § 5; 1951 c 32 § 20.]

RCW 70.79.200 Lost or destroyed certificate or commission. If a certificate or commission is lost or destroyed, a new certificate or commission shall be issued in its place without another examination. [1951 c 32 § 21.]

RCW 70.79.210 Inspectors--Performance bond required. The chief inspector shall furnish a bond in the sum of five thousand dollars and each of the deputy inspectors, employed and paid by the state, shall furnish a bond in the sum of two thousand dollars conditioned upon the faithful performance of their duties and upon a true account of moneys handled by them respectively and the payment thereof to the proper recipient. The cost of said bonds shall be paid by the state. [1951 c 32 § 35.]

RCW 70.79.220 Inspections--Who shall make. The inspections herein required shall be made by the chief inspector, by a deputy inspector, or by a special inspector provided for in this chapter. [1951 c 32 § 25.]

RCW 70.79.230 Access to premises by inspectors. The chief inspector, or any deputy or special inspector, shall have free access, during reasonable hours, to any premises in the state where a boiler or unfired pressure vessel is being constructed, or is being installed or operated, for the purpose of ascertaining whether such boiler or unfired pressure vessel is constructed, installed and operated in accordance with the provisions of this chapter. [1951 c 32 § 17.]

RCW 70.79.240 Inspection of boilers, unfired pressure vessels--Scope--Frequency. Each boiler and unfired pressure vessel used or proposed to be used within this state, except boilers or unfired pressure vessels exempt in RCW 70.79.080 and 70.79.090, shall be thoroughly inspected as to their construction, installation, condition and operation, as follows:

(1) Power boilers shall be inspected annually both internally and externally while not under pressure, except that the board may provide for longer periods between inspections where the contents, history, or operation of the power boiler or the material of which it is constructed warrant special consideration. Power boilers shall also be inspected annually externally while under pressure if possible;

(2) Low pressure heating boilers shall be inspected both internally and externally biennially where construction will permit;

(3) Unfired pressure vessels subject to internal corrosion shall be inspected both internally and externally biennially where construction will permit, except that the board may, in its discretion, provide for longer periods between inspections;

(4) Unfired pressure vessels not subject to internal corrosion shall be inspected externally at intervals set by the board, but internal inspections shall not be required of unfired pressure vessels, the contents of which are known to be non-corrosive to the material of which the shell, head, or fittings are constructed, either from the chemical composition of the contents or from evidence that the contents are adequately treated with a corrosion inhibitor, provided that such vessels are constructed in accordance with the rules and regulations of the board or in accordance with standards substantially equivalent to the rules and regulations of the board, in effect at the time of manufacture. [1993 c 391 § 1; 1951 c 32 § 22.]

RCW 70.79.250 Inspection--Frequency--Grace period. In the case of power boilers a grace period of not more than two months longer than the period established by the board under RCW 70.79.240(1) may elapse between internal inspections of a boiler while not under pressure or between external inspections of a boiler while under pressure; in the case of low pressure heating boilers not more than twenty-six months shall elapse between inspections, and in the case of unfired pressure vessels not more than two months longer than the period between inspections prescribed by the board shall elapse between internal inspections. [1993 c 391 § 2; 1951 c 32 § 23.]

RCW 70.79.260 Inspection--Frequency--Modification by rules. The rules and regulations formulated by the board applying to the inspection of unfired pressure vessels may be modified by the board to reduce or extend the interval between required inspections where the contents of the vessel or the material of which it is constructed warrant special consideration. [1951 c 32 § 24.]

RCW 70.79.270 Hydrostatic test. If at any time a hydrostatic test shall be deemed necessary to determine the safety of a boiler or unfired pressure vessel, [the] same shall be made, at the discretion of the inspector, by the owner or user thereof. [1951 c 32 § 26.]

RCW 70.79.280 Inspection during construction. All boilers and all unfired pressure vessels to be installed in this state after the twelve-month period from the date upon which the rules of the board shall become effective shall be inspected during construction as required by the applicable rules of the board by an inspector authorized to inspect boilers and unfired pressure vessels in this state, or, if constructed outside of the state, by an inspector holding a certificate from the national board of boiler and pressure vessel inspectors, or a certificate of competency as an inspector of boilers and unfired pressure vessels for a state that has a standard of examination substantially equal to that of this state as provided in RCW 70.79.170. [1999 c 183 § 9; 1951 c 32 § 27.]

RCW 70.79.290 Inspection certificate--Contents--Posting--Fee. If, upon inspection, a boiler or pressure vessel is found to comply with the rules and regulations of the board, and upon the appropriate fee payment made directly to the chief inspector, as required by RCW 70.79.160 or 70.79.330, the chief inspector shall issue to the owner or user of such a boiler or pressure vessel an inspection certificate bearing the date of inspection and specifying the maximum pressure under which the boiler or pressure vessel may be operated. Such inspection certificate shall be valid for not more than fourteen months from its date in the case of power boilers and twenty-six months in the case of low pressure heating boilers, and for not more than two months longer than the authorized inspection period in the case of pressure vessels. Certificates shall be posted under glass in the room containing the boiler or pressure vessel inspected. If the boiler or pressure vessel is not located within a building, the certificate shall be posted in a location convenient to the boiler or pressure vessel inspected or, in the case of a portable boiler or pressure vessel, the certificate shall be kept in a protective container to be fastened to the boiler or pressure vessel or in a tool box accompanying the boiler or pressure vessel. [1977 ex.s. c 175 § 1; 1970 ex.s. c 21 § 1; 1951 c 32 § 28.]

RCW 70.79.300 Inspection certificate invalid on termination of insurance. No inspection certificate issued for an insured boiler or unfired pressure vessel inspected by a special inspector shall be valid after the boiler or unfired pressure vessel, for which it was issued, shall cease to be insured by a company duly authorized by this state to carry such insurance. [1951 c 32 § 29.]

RCW 70.79.310 Inspection certificate--Suspension--Reinstatement. The chief inspector, or his or her authorized representative, may at any time suspend an inspection certificate when, in his or her opinion, the boiler or unfired pressure vessel for which it was issued cannot be operated without menace to the public safety, or when the boiler or unfired pressure vessel is found not to comply with the rules herein provided. A special inspector shall

have corresponding powers with respect to inspection certificates for boilers or unfired pressure vessels insured or operated by the company employing him or her. Such suspension of an inspection certificate shall continue in effect until such boiler or unfired pressure vessel shall have been made to conform to the rules of the board, and until said inspection certificate shall have been reinstated. [1999 c 183 § 10; 1951 c 32 § 30.]

RCW 70.79.320 Operating without inspection certificate prohibited--Penalty. (1) It shall be unlawful for any person, firm, partnership, or corporation to operate under pressure in this state a boiler or unfired pressure vessel, to which this chapter applies, without a valid inspection certificate as provided for in this chapter.

(2) The department may assess a penalty against a person violating a provision of this chapter. The penalty shall be not more than five hundred dollars. Each day that the violation continues is a separate violation and is subject to a separate penalty.

(3) The department may not assess a penalty until it adopts rules describing the method it will use to calculate penalties for various violations.

(4) The department shall notify the violator of its action, and the reasons for its action, in writing. The department shall send the notice by certified mail to the violator that a hearing may be requested under RCW 70.79.361. The hearing shall not stay the effect of the penalty. [2005 c 22 § 6; 1986 c 97 § 2; 1951 c 32 § 31.]

RCW 70.79.330 Inspection fees--Expenses--Schedules. The owner or user of a boiler or pressure vessel required by this chapter to be inspected by the chief inspector, or his deputy inspector, shall pay directly to the chief inspector, upon completion of inspection, fees and expenses in accordance with a schedule adopted by the board and approved by the director of the department of labor and industries in accordance with the requirements of the Administrative Procedure Act, chapter 34.05 RCW. [1977 ex.s. c 175 § 2; 1970 ex.s. c 21 § 2; 1963 c 217 § 1; 1951 c 32 § 32.]

RCW 70.79.350 Inspection fees--Receipts for--Pressure systems safety fund. The chief inspector shall give an official receipt for all fees required by chapter 70.79 RCW and shall transfer all sums so received to the treasurer of the state of Washington as ex officio custodian thereof and the treasurer shall place all sums in a special fund hereby created and designated as the "pressure systems safety fund". Funds shall be paid out upon vouchers duly and regularly issued therefore and approved by the director of the department of labor and industries. The treasurer, as ex officio custodian of the fund, shall keep an accurate record of any payments into the fund, and of all disbursements there from. The fund shall be used exclusively to defray only the expenses of administering chapter 70.79 RCW by the chief inspector as authorized by law and the expenses incident to the maintenance of the office. The fund shall be charged with its pro rata share of the cost of administering the fund which is to be determined by the director of financial management and by the director of the department of labor and industries.

During the 2003-2005 fiscal biennium, the legislature may transfer from the pressure systems safety fund to the state general fund such amounts as reflect the excess fund balance of the fund. [2003 1st sp.s. c 25 § 931; 1979 c 151 § 171; 1977 ex.s. c 175 § 3; 1951 c 32 § 34.]

NOTES:

Severability--Effective date--2003 1st sp.s. c 25: See notes following RCW 19.28.351.

RCW 70.79.361 Board determinations--Appeals. (1) No person, firm, partnership, corporation, or other entity may install or maintain any standards that violate this chapter. In cases where the interpretation and application of the installation or maintenance standards prescribed in this chapter is in dispute, the board shall determine the methods of installation or maintenance to be used in the particular case submitted for its decision. To appeal the board's decision, a person, firm, partnership, corporation, or other entity shall, in writing, notify the chief boiler inspector. The notice shall specify the ruling or interpretation desired

and the contention of the person, firm, partnership, corporation, or other entity as to the proper interpretation or application on the question on which a decision is desired.

(2) Any person, firm, partnership, corporation, or other entity wishing to appeal a penalty issued under this chapter may appeal to the board. The appeal shall be filed within twenty days after service of the notice of the penalty to the assessed party by filing a written notice of appeal with the chief boiler inspector. The hearing and review procedures shall be conducted by the board in accordance with chapter 34.05 RCW. [2005 c 22 § 4.]

RCW 70.79.900 Severability--1951 c 32. The fact that any section, subsection, sentence, clause, or phrase of this chapter is declared unconstitutional or invalid for any reason shall not affect the remaining portions of this chapter. [1951 c 32 § 37.]

Chapter Listing

WAC Sections

- 296-104-001 Administration--To what do these rules apply?
- 296-104-010 Administration--What are the definitions of terms used in this chapter?
- 296-104-015 Administration -- When and where are the board meetings held?
- 296-104-017 Administration -- How are rules affected if other rules are invalidated?
- 296-104-018 Administration -- How are rules interpreted and revised?
- 296-104-020 Administration -- What are the filing requirements for boilers and unfired pressure vessels before their installation/reinstallation?
- 296-104-021 Administration -- What is the registration requirement for new standard boilers and unfired pressure vessels?
- 296-104-025 Administration -- What are the notification requirements following an accident involving a boiler or pressure vessel?
- 296-104-030 Administration -- What is the penalty for operation of unsafe boilers or unfired pressure vessels?
- 296-104-035 Administration -- What are conflicts of interest for inspectors?
- 296-104-040 Administration -- When should inspectors submit inspection reports and on what forms?
- 296-104-045 Administration -- What are the insurance companies' responsibilities?
- 296-104-050 Administration -- What are the requirements for a boiler inspector?
- 296-104-060 Administration--When shall an inspectors' Washington state commission be issued, suspended, or revoked?
- 296-104-065 Administration -- How should an inspector obtain a Washington state commission?
- 296-104-100 Inspection -- How often must boilers and unfired pressure vessels be inspected?
- 296-104-102 Inspection -- What are the standards for in-service inspection?
- 296-104-105 Inspection -- How much time is required for notification of inspection?
- 296-104-110 Inspection -- What will be done when boilers or unfired pressure vessels are deemed unsafe or defective?
- 296-104-115 Inspection -- What will be done when defective conditions are concealed by covering?
- 296-104-125 Inspection -- What are the requirements for obtaining a certificate of inspection?
- 296-104-130 Inspection -- When are inspection certificates valid?
- 296-104-135 Inspection -- What are the requirements for restamping of boilers and unfired pressure vessels?
- 296-104-140 Inspection -- How should a state stamp be applied?
- 296-104-145 Inspection--How are groups of vessels operating as a single unit classified?
- 296-104-150 Inspection -- How are unfired steam boilers classified?
- 296-104-151 Inspection -- What are the requirements for rental boilers?

- [296-104-155](#) Inspection -- What preparations are necessary prior to internal inspections?
- [296-104-160](#) Inspection -- What happens if a boiler or unfired pressure vessel is improperly prepared for inspection?
- [296-104-165](#) Inspection -- When should coverings be removed for inspection?
- [296-104-170](#) Inspection -- When are shop inspections required?
- [296-104-180](#) Inspection -- How are radioactive systems inspected?
- [296-104-200](#) Construction -- What are the standards for new construction?
- [296-104-205](#) Construction -- What are the requirements for nonstandard new construction?
- [296-104-210](#) Construction -- What are the requirements for construction of boilers and unfired pressure vessels of special design?
- [296-104-215](#) Construction -- What are the requirements to use nonstandard boilers and unfired pressure vessels constructed prior to January 1, 1952?
- [296-104-220](#) Construction -- What are the requirements to use nonstandard second hand boilers and unfired pressure vessels?
- [296-104-230](#) Construction -- What are the testing requirements for new boilers or unfired pressure vessels exempted from code requirements for volume, pressure or temperature?
- [296-104-235](#) Construction -- What are the requirements for code exempted boiler and unfired pressure vessel safety relief valves?
- [296-104-245](#) Construction -- Combustible fluid heaters.
- [296-104-255](#) Installation -- Clearance at top of boilers.
- [296-104-256](#) Installation -- What are the required clearances for boilers?
- [296-104-260](#) Installation -- What are the required clearances for unfired pressure vessels?
- [296-104-265](#) Installation -- What are the requirements for unfired pressure vessels installed underground?
- [296-104-271](#) Installation -- How does an owner, user, or installer obtain a variance from clearances?
- [296-104-273](#) Installation -- What inspections are required for reinstalled standard boilers or unfired pressure vessels?
- [296-104-295](#) Installation -- What are the requirements for an explosion door?
- [296-104-300](#) Installation -- What control and limit devices are required on automatically fired boilers prior to June 1989?
- [296-104-301](#) Installation -- What control and limit devices are required on automatically fired boilers after June 1989?
- [296-104-302](#) Installation -- What control and limit devices are required on automatically fired boilers after December 1998?
- [296-104-303](#) Installation -- What control and limit devices are required on automatically fired boilers after December 2004?
- [296-104-307](#) Installation -- When are platforms around boilers required?
- [296-104-310](#) Installation -- How many exits are required in boiler rooms?

- [296-104-316](#) Installation -- What safety pressure relief devices are required on boilers and unfired pressure vessels?
- [296-104-320](#) Installation -- Where should the discharge from safety pressure relief devices, blow offs and drains be directed?
- [296-104-325](#) Installation -- What are the requirements for boiler and unfired pressure vessel supports?
- [296-104-330](#) Installation -- What are the relief or safety valve requirements when pressure reducing valves are used?
- [296-104-405](#) Existing installation -- How can the maximum allowable working pressure be established for nonstandard boilers or unfired pressure vessels?
- [296-104-502](#) Repairs -- What are the requirements for nonnuclear boilers and unfired pressure vessel repairs and alterations?
- [296-104-510](#) Repairs -- When a lap seam crack is discovered along a riveted longitudinal joint on a boiler or unfired pressure vessel, what action is required and what repairs are allowed?
- [296-104-515](#) Repairs -- Do riveted repairs to boilers and unfired pressure vessels require prior approval?
- [296-104-520](#) Repairs -- What are the requirements for repair of nonnuclear safety devices?
- [296-104-535](#) Repairs -- What are the requirements for nuclear repairs/replacement?
- [296-104-540](#) Repairs -- What are the requirements for nuclear repairs of safety devices?
- [296-104-700](#) What are the inspection fees -- Examination fees -- Certificate fees -- Expenses?
- [296-104-701](#) What are the civil penalties?

DISPOSITIONS OF SECTIONS FORMERLY CODIFIED IN THIS CHAPTER

- 296-104-002 Approval by director. [Approval, filed 3/23/60.] Repealed by 99-22-026, filed 10/26/99, effective 11/26/99. Statutory Authority: RCW 70.79.030 and 70.79.040.
- 296-104-055 Administration--What are the examination fees? [Statutory Authority: RCW 70.79.030, 70.79.040, 70.79.150, 70.79.290, 70.79.330, 70.79.350, and chapter 70.79 RCW. 03-12-051, § 296-104-055, filed 5/30/03, effective 6/30/03; 02-12-021, § 296-104-055, filed 5/28/02, effective 6/28/02; 01-12-034, § 296-104-055, filed 5/29/01, effective 6/29/01. Statutory Authority: RCW 70.79.030 and 70.79.040. 99-22-026, § 296-104-055, filed 10/26/99, effective 11/26/99. Statutory Authority: RCW 70.79.040. 93-12-014, § 296-104-055, filed 5/21/93, effective 6/21/93. Statutory Authority: RCW 70.79.030 and 70.79.330. 82-24-025 (Order 82-36), § 296-104-055, filed 11/23/82, effective 1/1/83; Order 74-37, § 296-104-055, filed 11/8/74; Part II, § 8, filed 3/23/60.] Repealed by 04-01-194, filed 12/24/03, effective 1/24/04. Statutory Authority: RCW 70.79.030, 70.79.040, 70.79.150, 70.79.290, 70.79.330, 70.79.350, and chapter 70.79 RCW.
- 296-104-107 Inspection -- Which unfired pressure vessels in places of public assembly are subject to these rules? [Statutory Authority: RCW 70.79.030 and 70.79.040. 97-20-109, § 296-104-107, filed 9/30/97, effective 10/31/97.] Repealed by 99-22-026, filed 10/26/99, effective 11/26/99. Statutory Authority: RCW 70.79.030 and 70.79.040.

- 296-104-120 Inspection -- Condemned boilers or unfired pressure vessel. [Statutory Authority: RCW 70.79.040. 91-11-107, § 296-104-120, filed 5/22/91, effective 6/22/91; Part III, § 5, filed 3/23/60.] Repealed by 95-19-058, filed 9/15/95, effective 10/16/95. Statutory Authority: RCW 70.79.030 and 70.79.040.
- 296-104-195 Pressure vessel clearances. [Statutory Authority: RCW 70.79.040. 90-04-009, § 296-104-195, filed 1/26/90, effective 2/26/90.] Repealed by 96-21-081, filed 10/16/96, effective 11/16/96. Statutory Authority: RCW 70.79.030 and 70.79.040.
- 296-104-201 Inspection of systems -- Standard for water chillers. [Statutory Authority: RCW 70.79.030. 80-14-015 (Order 80-12), § 296-104-201, filed 9/23/80.] Repealed by 86-01-088 (Order 85-26), filed 12/19/85. Statutory Authority: RCW 70.79.040 and 70.79.050.
- 296-104-225 Inspection of systems -- Reinstalled boiler or unfired pressure vessel. [Part IV, § 6, filed 3/23/60.] Repealed by 96-21-081, filed 10/16/96, effective 11/16/96. Statutory Authority: RCW 70.79.030 and 70.79.040.
- 296-104-240 Construction -- When are piping components considered unfired pressure vessels? [Statutory Authority: RCW 70.79.030, 70.79.040 and chapter 70.79 RCW. 00-21-024, § 296-104-240, filed 10/10/00, effective 11/13/00. Statutory Authority: RCW 70.79.030 and 70.79.040. 96-21-081, § 296-104-240, filed 10/16/96, effective 11/16/96; Part IV, § 9, filed 3/23/60.] Repealed by 02-23-036, filed 11/13/02, effective 12/14/02. Statutory Authority: RCW 70.79.030, 70.79.040, 70.79.150, 70.79.290, 70.79.330, 70.79.350, and chapter 70.79 RCW.
- 296-104-250 Inspection of systems -- Hot water heating systems. [Part IV, § 11, filed 3/23/60.] Repealed by 78-03-057 (Order 78-3), filed 2/22/78. Statutory Authority: RCW 70.79.030.
- 296-104-256 Installation -- What inspections are required for reinstalled standard boilers or unfired pressure vessels? [Statutory Authority: RCW 70.79.030, 70.79.040, 70.79.150, 70.79.290, 70.79.330, 70.79.350, and chapter 70.79 RCW. 01-24-061, § 296-104-256, filed 11/30/01, effective 12/31/01. Statutory Authority: RCW 70.79.030 and 70.79.040. 96-21-081, § 296-104-256, filed 10/16/96, effective 11/16/96.] Decodified by 02-23-036, filed 11/13/02, effective 12/14/02. Statutory Authority: RCW 70.79.030, 70.79.040, 70.79.150, 70.79.290, 70.79.330, 70.79.350, and chapter 70.79 RCW. Recodified as RCW 296-104-273.
- 296-104-260 Installation -- Clearance front, back and sides. [Statutory Authority: RCW 70.79.030 and 70.79.040. 96-21-081, § 296-104-260, filed 10/16/96, effective 11/16/96. Statutory Authority: Chapter 70.79 RCW. 89-15-025 (Order 89-05), § 296-104-260, filed 7/13/89, effective 8/13/89; Part IV, § 13, filed 3/23/60.] Decodified and amended by 02-23-036, filed 11/13/02, effective 12/14/02. Statutory Authority: RCW 70.79.030, 70.79.040, 70.79.150, 70.79.290, 70.79.330, 70.79.350, and chapter 70.79 RCW. Recodified as RCW 296-104-256.

- 296-104-265 Installation -- What control and limit devices are required on boilers? [Statutory Authority: RCW 70.79.030, 70.79.040, 70.79.150, 70.79.290, 70.79.330, 70.79.350, and chapter 70.79 RCW. 01-24-061, § 296-104-265, filed 11/30/01, effective 12/31/01. Statutory Authority: RCW 70.79.030, 70.79.040 and chapter 70.79 RCW. 00-21-024, § 296-104-265, filed 10/10/00, effective 11/13/00. Statutory Authority: RCW 70.79.030 and 70.79.040. 98-22-024, § 296-104-265, filed 10/28/98, effective 11/28/98; 97-20-109, § 296-104-265, filed 9/30/97, effective 10/31/97. Statutory Authority: RCW 70.79.240. 88-01-064 (Order 87-25), § 296-104-265, filed 12/17/87; Part IV, § 14, filed 3/23/60.] Decodified by 02-23-036, filed 11/13/02, effective 12/14/02. Statutory Authority: RCW 70.79.030, 70.79.040, 70.79.150, 70.79.290, 70.79.330, 70.79.350, and chapter 70.79 RCW. Recodified as RCW 296-104-300.
- 296-104-270 Installation -- What are the requirements for an explosion door? [Statutory Authority: RCW 70.79.030 and 70.79.040. 97-20-109, § 296-104-270, filed 9/30/97, effective 10/31/97; Part IV, § 15, filed 3/23/60.] Decodified by 02-23-036, filed 11/13/02, effective 12/14/02. Statutory Authority: RCW 70.79.030, 70.79.040, 70.79.150, 70.79.290, 70.79.330, 70.79.350, and chapter 70.79 RCW. Recodified as RCW 296-104-295.
- 296-104-273 Installation -- Pressure vessel clearances. [Statutory Authority: RCW 70.79.030 and 70.79.040. 96-21-081, § 296-104-273, filed 10/16/96, effective 11/16/96.] Decodified and amended by 02-23-036, filed 11/13/02, effective 12/14/02. Statutory Authority: RCW 70.79.030, 70.79.040, 70.79.150, 70.79.290, 70.79.330, 70.79.350, and chapter 70.79 RCW. Recodified as RCW 296-104-260.
- 296-104-275 Inspection of systems -- Hydro-pneumatic tanks. [Part IV, § 16, filed 3/23/60.] Repealed by 78-03-057 (Order 78-3), filed 2/22/78. Statutory Authority: RCW 70.79.030.
- 296-104-280 Inspection of systems -- Electric steam generators. [Part IV, § 17, filed 3/23/60.] Repealed by 78-03-057 (Order 78-3), filed 2/22/78. Statutory Authority: RCW 70.79.030.
- 296-104-285 Unfired pressure vessels in places of public assembly. [Statutory Authority: RCW 70.79.030. 78-03-057 (Order 78-3), § 296-104-285, filed 2/22/78.] Repealed by 99-08-049, filed 4/1/99, effective 5/2/99. Statutory Authority: RCW 70.79.030 and 70.79.040.
- 296-104-300 Installation -- When do I need to provide platforms around boilers? [Statutory Authority: RCW 70.79.030 and 70.79.040. 97-20-109, § 296-104-300, filed 9/30/97, effective 10/31/97; Part V, § 1, filed 3/23/60.] Decodified by 02-23-036, filed 11/13/02, effective 12/14/02. Statutory Authority: RCW 70.79.030, 70.79.040, 70.79.150, 70.79.290, 70.79.330, 70.79.350, and chapter 70.79 RCW. Recodified as 296-104-307.
- 296-104-305 Installation -- How many exits are required in boiler rooms? [Statutory Authority: RCW 70.79.030 and 70.79.040. 97-20-109, § 296-104-305, filed 9/30/97, effective 10/31/97; Part V, § 2, filed 3/23/60.] Decodified by 02-23-036, filed 11/13/02, effective 12/14/02. Statutory Authority: RCW 70.79.030, 70.79.040, 70.79.150, 70.79.290, 70.79.330, 70.79.350, and chapter 70.79 RCW. Recodified as 296-104-310.
- 296-104-307 Installation -- What safety pressure relief devices are required on boilers and pressure vessels? [Statutory Authority: RCW 70.79.030, 70.79.040 and chapter 70.79 RCW. 00-21-024, § 296-104-307, filed 10/10/00, effective 11/13/00. Statutory Authority: RCW 70.79.030 and 70.79.040. 98-22-024, § 296-104-307, filed 10/28/98, effective 11/28/98.] Decodified by 02-23-036, filed 11/13/02, effective 12/14/02. Statutory Authority: RCW 70.79.030, 70.79.040, 70.79.150, 70.79.290, 70.79.330, 70.79.350, and chapter 70.79 RCW. Recodified as 296-104-316.

- 296-104-310 Installation -- Where should the discharge from safety valves, blow offs and drains be directed? [Statutory Authority: RCW 70.79.030 and 70.79.040. 98-22-024, § 296-104-310, filed 10/28/98, effective 11/28/98; 97-20-109, § 296-104-310, filed 9/30/97, effective 10/31/97; Part V, § 3, filed 3/23/60.] Decodified by 02-23-036, filed 11/13/02, effective 12/14/02. Statutory Authority: RCW 70.79.030, 70.79.040, 70.79.150, 70.79.290, 70.79.330, 70.79.350, and chapter 70.79 RCW. Recodified as RCW 296-104-320.
- 296-104-315 New installations -- Blow off tanks. [Statutory Authority: RCW 70.79.030. 78-03-057 (Order 78-3), § 296-104-315, filed 2/22/78; Part V, § 4, filed 3/23/60.] Repealed by 89-15-025 (Order 89-05), filed 7/13/89, effective 8/13/89. Statutory Authority: Chapter 70.79 RCW.
- 296-104-320 Installation -- What are the requirements for underground installations? [Statutory Authority: RCW 70.79.030 and 70.79.040. 97-20-109, § 296-104-320, filed 9/30/97, effective 10/31/97; Part V, § 5, filed 3/23/60.] Decodified by 02-23-036, filed 11/13/02, effective 12/14/02. Statutory Authority: RCW 70.79.030, 70.79.040, 70.79.150, 70.79.290, 70.79.330, 70.79.350, and chapter 70.79 RCW. Recodified as RCW 296-104-265.
- 296-104-400 Existing installations -- Stamping of existing boilers and unfired pressure vessels. [Statutory Authority: RCW 70.79.040. 90-20-029, § 296-104-400, filed 9/24/90, effective 10/25/90; Part VI, § 1, filed 3/23/60.] Repealed by 97-20-109, filed 9/30/97, effective 10/31/97. Statutory Authority: RCW 70.79.030 and 70.79.040.
- 296-104-410 Existing installations -- Noncode steel heating boilers. [Part VI, § 3, filed 3/23/60.] Repealed by 97-20-109, filed 9/30/97, effective 10/31/97. Statutory Authority: RCW 70.79.030 and 70.79.040.
- 296-104-415 Existing installations -- Noncode cast iron boilers. [Part VI, § 4, filed 3/23/60.] Repealed by 97-20-109, filed 9/30/97, effective 10/31/97. Statutory Authority: RCW 70.79.030 and 70.79.040.
- 296-104-500 Nonnuclear repairs. [Statutory Authority: RCW 70.79.040. 93-12-014, § 296-104-500, filed 5/21/93, effective 6/21/93; 92-11-070, § 296-104-500, filed 5/20/92, effective 6/20/92. Statutory Authority: RCW 70.79.030. 86-04-059 (Order 86-01), § 296-104-500, filed 2/4/86. Statutory Authority: RCW 70.79.030 and 70.79.330. 84-21-012 (Order 84-20), § 296-104-500, filed 10/5/84; Part VII, § 1, filed 3/23/60.] Repealed by 94-21-002, filed 10/5/94, effective 11/5/94. Statutory Authority: RCW 70.79.040.
- 296-104-501 Nonnuclear alterations. [Statutory Authority: RCW 70.79.040. 93-12-014, § 296-104-501, filed 5/21/93, effective 6/21/93; 92-11-070, § 296-104-501, filed 5/20/92, effective 6/20/92. Statutory Authority: RCW 70.79.030. 86-04-059 (Order 86-01), § 296-104-501, filed 2/4/86.] Repealed by 94-21-002, filed 10/5/94, effective 11/5/94. Statutory Authority: RCW 70.79.040.
- 296-104-505 Repairs -- Repairs by fusion welding. [Part VII, § 2, filed 3/23/60.] Repealed by 94-21-002, filed 10/5/94, effective 11/5/94. Statutory Authority: RCW 70.79.040.
- 296-104-525 Repairs -- Hydrostatic pressure tests. [Part VII, § 6, filed 3/23/60.] Repealed by 98-22-024, filed 10/28/98, effective 11/28/98. Statutory Authority: RCW 70.79.030 and 70.79.040.
- 296-104-530 Repairs -- Can air or vapor testing be performed? [Statutory Authority: RCW 70.79.030 and 70.79.040. 98-22-024, § 296-104-530, filed 10/28/98, effective 11/28/98. Statutory Authority: RCW 70.79.040. 92-11-070, § 296-104-530, filed 5/20/92, effective 6/20/92; Part VII, § 7, filed 3/23/60.] Repealed by 04-01-194, filed 12/24/03, effective 1/24/04. Statutory Authority: RCW 70.79.030, 70.79.040, 70.79.150, 70.79.290, 70.79.330, 70.79.350, and chapter 70.79 RCW.
- 296-104-600 General requirements -- Conditions not covered by these rules. [Part VIII, § 1, filed 3/23/60.] Repealed by 98-22-024, filed 10/28/98, effective 11/28/98. Statutory Authority: RCW 70.79.030 and 70.79.040.
- 296-104-800 Inspection of systems subject to radioactivity. [Statutory Authority: RCW

70.79.240. 88-01-064 (Order 87-25), § 296-104-800, filed 12/17/87.] Repealed by 98-22-024, filed 10/28/98, effective 11/28/98. Statutory Authority: RCW 70.79.030 and 70.79.040.

296-104-801 Nuclear repairs/replacement. [Statutory Authority: RCW 70.79.040. 91-11-106, § 296-104-801, filed 5/22/91, effective 6/22/91.] Repealed by 98-22-024, filed 10/28/98, effective 11/28/98. Statutory Authority: RCW 70.79.030 and 70.79.040.

296-104-805 Nuclear repairs -- Safety devices. [Statutory Authority: RCW 70.79.040. 91-11-106, § 296-104-805, filed 5/22/91, effective 6/22/91.] Repealed by 98-22-024, filed 10/28/98, effective 11/28/98. Statutory Authority: RCW 70.79.030 and 70.79.040.

296-104-001

Administration – To what do these rules apply?

The following rules and regulations apply to all boilers and unfired pressure vessels except those exempt under RCW 70.79.080. Boilers and unfired pressure vessels listed under RCW 70.79.090 are exempt from inspection and fees, but shall comply with all rules for construction, installation, repairs and general requirements.

[Statutory Authority: RCW 70.79.030 and 70.79.040. 99-22-026, § 296-104-001, filed 10/26/99, effective 11/26/99; Promulgation, filed 3/23/60.]

296-104-010

Administration – What are the definitions of terms used in this chapter?

"**Agriculture purposes**" shall mean any act performed on a farm in production of crops or livestock, and shall include the storage of such crops and livestock in their natural state, but shall not be construed to include the processing or sale of crops or livestock.

"**Attendant**" shall mean the person in charge of the operation of a boiler or unfired pressure vessel.

"**Automatic operation of a boiler**" shall mean automatic unattended control of feed water and fuel in order to maintain the pressure and temperature within the limits set. Controls must be such that the operation follows the demand without interruption. Manual restart may be required when the burner is off because of low water, flame failure, power failure, high temperatures or pressures.

"**Board of boiler rules**" or "**board**" shall mean the board created by law and empowered under RCW 70.79.010.

"**Boiler and unfired pressure vessel installation/reinstallation permit**," shall mean a permit approved by the chief inspector before starting installation or reinstallation of any boiler and unfired pressure vessel within the jurisdiction of Washington.

Owner/user inspection agency's and Washington specials are exempt from "boiler and unfired pressure vessel installation/reinstallation permit."

"**Boilers and/or unfired pressure vessels**" - below are definitions for types of boilers and unfired pressure vessels used in these regulations:

- **"Condemned boiler or unfired pressure vessel"** shall mean a boiler or unfired pressure vessel that has been inspected and declared unsafe or disqualified for further use by legal requirements and appropriately marked by an inspector.
- **"Hot water heater"** shall mean a closed vessel designed to supply hot water for external use to the system. All vessels must be listed by a nationally recognized testing agency and shall be protected with an approved temperature and pressure safety relief valve and shall not exceed any of the following limits:
 - * Pressure of 160 psi (1100 kpa);
 - * Temperature of 210 degrees F (99° C);
 - * Capacity of 120 U.S. gallons (454 liters);
 - * Input of 200,000 BTU/hr (58.58 kw). Note that if input exceeds 200,000 BTU/hr (58.58 kw), other terms defined in this section may apply.
 - * Hot water heaters exceeding 200,000 BTU/hr (58.58 kw) must be ASME code stamped.
- **"Low pressure heating boiler"** shall mean a steam or vapor boiler operating at a pressure not exceeding 15 psig or a boiler in which water or other fluid is heated and intended for operation at pressures not exceeding 160 psig or temperatures not exceeding 250 degrees F by the direct application of energy from the combustion of fuels or from electricity, solar or nuclear energy including lined potable water heaters.
- **"Nonstandard boiler or unfired pressure vessel"** shall mean a boiler or unfired pressure vessel that does not bear marking of the codes adopted in WAC [296-104-200](#).
- **"Power boiler"** shall mean a boiler in which steam or other vapor is generated at a pressure of more than 15 psig for use external to itself or a boiler in which water or other fluid is heated and intended for operation at pressures in excess of 160 psig and/or temperatures in excess of 250 degrees F by the direct application of energy from the combustion of fuels or from electricity, solar or nuclear energy.
- **"Reinstalled boiler or unfired pressure vessel"** shall mean a boiler or unfired pressure vessel removed from its original setting and reset at the same location or at a new location without change of ownership.
- **"Rental boiler"** shall mean any power or low pressure heating boiler that is under a rental contract between owner and user.
- **"Second hand boiler or unfired pressure vessel"** shall mean a boiler or unfired pressure vessel of which both the location and ownership have changed after primary use.
- **"Standard boiler or unfired pressure vessel"** shall mean a boiler or unfired pressure vessel which bears the marking of the codes adopted in WAC [296-104-200](#).
- **"Unfired pressure vessel"** shall mean a closed vessel under pressure excluding:
 - * Fired process tubular heaters;
 - * Pressure containers which are integral parts of components of rotating or reciprocating mechanical devices where the primary design considerations and/or stresses are derived from the functional requirements of the device;
 - * Piping whose primary function is to transport fluids from one location to another;
 - * Those vessels defined as low pressure heating boilers or power boilers.
- **"Unfired steam boiler"** shall mean a pressure vessel in which steam is generated by an indirect application of heat. It shall not include pressure vessels known as evaporators, heat exchangers, or vessels in which steam is generated by the use of heat resulting from the operation of a processing system containing a number of pressure vessels, such as used in the manufacture of chemical and petroleum products, which will be classed as unfired pressure vessels.
- **"Certificate of competency"** shall mean a certificate issued by the Washington state board of boiler rules to a person who has passed the tests as set forth in WAC [296-104-050](#).

"Code, API-510" shall mean the Pressure Vessel Inspection Code of the American Petroleum Institute with addenda and revisions, thereto made and approved by the institute which have been adopted by the board of boiler rules in accordance with the provisions of RCW 70.79.030.

"Code, ASME" shall mean the boiler and pressure vessel code of the American Society of Mechanical Engineers with addenda thereto made and approved by the council of the society which have been adopted by the board of boiler rules in accordance with the provisions of RCW 70.79.030.

"Code, NBIC" shall mean the National Board Inspection Code of the National Board of Boiler and Pressure Vessel Inspectors with addenda and revisions, thereto made and approved by the National Board of Boiler and Pressure Vessel Inspectors and adopted by the board of boiler rules in accordance with the provisions of RCW 70.79.030.

"Commission" shall mean an annual commission card issued to a person in the employ of Washington state, an insurance company or a company owner/user inspection agency holding a Washington state certificate of competency which authorizes them to perform inspections of boilers and/or unfired pressure vessels.

"Department" as used herein shall mean the department of labor and industries of the state of Washington.

"Director" shall mean the director of the department of labor and industries.

"Domestic and/or residential purposes" shall mean serving a private residence or an apartment house of less than six families.

"Existing installations" shall mean any boiler or unfired pressure vessel constructed, installed, placed in operation, or contracted for before January 1, 1952.

"Inspection, external" shall mean an inspection made while a boiler or unfired pressure vessel is in operation and includes the inspection and demonstration of controls and safety devices required by these rules.

"Inspection, internal" shall mean an inspection made when a boiler or unfired pressure vessel is shut down and handholds, manholes, or other inspection openings are open or removed for examination of the interior. An external ultrasonic examination of unfired pressure vessels less than 36" inside diameter shall constitute an internal inspection.

"Inspector" shall mean the chief boiler inspector, a deputy inspector, or a special inspector.

- **"Chief inspector"** shall mean the inspector appointed under RCW 70.79.100 who serves as the secretary to the board without a vote.
- **"Deputy inspector"** shall mean an inspector appointed under RCW 70.79.120.
- **"Special inspector"** shall mean an inspector holding a Washington commission identified under RCW 70.79.130.

"Nationwide engineering standard" shall mean a nationally accepted design method, formulae and practice acceptable to the board.

"Owner" or **"user"** shall mean a person, firm, or corporation owning or operating any boiler or unfired pressure vessel within the state.

"Owner/user inspection agency" shall mean an owner or user of boilers and/or pressure vessels that maintains an established inspection department, whose organization and inspection procedures meet the requirements of a nationally recognized standard acceptable to the department.

"Place of public assembly" or "assembly hall" shall mean a building or portion of a building used for the gathering together of 50 or more persons for such purposes as deliberation, education, instruction, worship, entertainment, amusement, drinking, or dining or waiting transportation. This shall also include child care centers (those agencies which operate for the care of thirteen or more children), public and private hospitals, nursing and boarding homes.

"Special design" shall mean a design using nationwide engineering standards other than the codes adopted in WAC [296-104-200](#) or other than allowed in WAC [296-104-230](#).

[Statutory Authority: Chapter 70.79 RCW. 04-21-069, § 296-104-010, filed 10/19/04, effective 1/1/05. Statutory Authority: RCW 70.79.030, 70.79.040, 70.79.150, 70.79.290, 70.79.330, 70.79.350, and chapter 70.79 RCW. 04-01-194, § 296-104-010, filed 12/24/03, effective 1/24/04; 02-23-036, § 296-104-010, filed 11/13/02, effective 12/14/02; 01-24-061, § 296-104-010, filed 11/30/01, effective 12/31/01. Statutory Authority: RCW 70.79.030, 70.79.040 and chapter 70.79 RCW. 00-21-024, § 296-104-010, filed 10/10/00, effective 11/13/00. Statutory Authority: RCW 70.79.030 and 70.79.040. 99-22-026, § 296-104-010, filed 10/26/99, effective 11/26/99; 98-22-024, § 296-104-010, filed 10/28/98, effective 11/28/98; 96-21-081, § 296-104-010, filed 10/16/96, effective 11/16/96. Statutory Authority: RCW 70.79.040. 94-21-002, § 296-104-010, filed 10/5/94, effective 11/5/94; 93-12-014, § 296-104-010, filed 5/21/93, effective 6/21/93; 92-11-070, § 296-104-010, filed 5/20/92, effective 6/20/92. Statutory Authority: RCW 70.79.240. 88-01-064 (Order 87-25), § 296-104-010, filed 12/17/87. Statutory Authority: RCW 70.79.040 and 70.79.050. 86-01-088 (Order 85-26), § 296-104-010, filed 12/19/85; Order 72-11, § 296-104-010, filed 7/7/72; Part I, filed 3/23/60.]

296-104-015

Administration – When and where are the board meetings held?

The board of boiler rules shall hold its regular meetings in January, March, May, September and November of each year. The time, place, and date of each regular meeting shall be set by the chairman of the board and published annually. Special meetings may be called by the chair.

[Statutory Authority: RCW 70.79.030 and 70.79.040. 99-22-026, § 296-104-015, filed 10/26/99, effective 11/26/99; 95-19-058, § 296-104-015, filed 9/15/95, effective 10/16/95. Statutory Authority: RCW 70.79.040. 91-11-107, § 296-104-015, filed 5/22/91, effective 6/22/91. Statutory Authority: RCW 70.79.050. 90-07-082, § 296-104-015, filed 3/21/90, effective 4/21/90. Statutory Authority: RCW 70.79.040 and 70.79.050. 86-01-088 (Order 85-26), § 296-104-015, filed 12/19/85; Order 72-11, § 296-104-015, filed 7/7/72.]

296-104-017

Administration – How are rules affected if other rules are invalidated?

Should any section, subsection, sentence, clause, phrase, provision or exemption of these rules be declared unconstitutional or invalid for any reason, such invalidity shall not affect the remaining portion or provisions.

[Statutory Authority: RCW 70.79.030 and 70.79.040. 98-22-024, § 296-104-017, filed 10/28/98, effective 11/28/98.]

296-104-018

Administration – How are rules interpreted and revised?

Stakeholders may request clarifications and interpretations of these rules by contacting the chief inspector. Interpretations will be brought to the board if the inquirer is aggrieved by the interpretation of the chief inspector (RCW 70.79.361). The board will consider written requests for interpretations and revisions to these definitions, rules, and regulations. Inquiries shall be limited to requests for interpretation of the rules or to proposed revisions to the existing rules and shall be submitted to the department of labor and industries forty-five days prior to the board of boiler rules meeting date in the following format:

- (1) Scope. Identify a single rule or closely related rules that are in dispute.
- (2) Background. State the purpose of the inquiry, which should be either to obtain an interpretation or to propose a revision to existing rules. Provide concise information needed for the board's understanding of the inquiry, including references to the WAC section as well as other code and/or standards paragraphs.
- (3) Inquiry structure. Provide statements in a condensed and precise question format and, where appropriate, compose in such a way that "yes" or "no" (perhaps with provisos) would be an acceptable reply.
- (4) Proposed reply. State what it is believed the rule requires. If in the inquirer's opinion a revision to the definitions, rules, and regulations is needed, recommended wording should be provided.

Inquiries shall be submitted by mail to:

Board of Boiler Rules

% Chief Inspector

Department of Labor & Industries

Boiler Section

P.O. Box 44410

Olympia, WA 98504-4410

or

Inquiries shall be submitted by delivery to:

Board of Boiler Rules

% Chief Inspector

Department of Labor & Industries

Boiler Section

7273 Linderson Way SW

Tumwater, WA 98501

[Statutory Authority: RCW 70.79.030, 70.79.040, 70.79.150, 70.79.290, 70.79.330, and 70.79.350. 05-22-092, § 296-104-018, filed 11/1/05, effective 1/1/06. Statutory Authority: RCW 70.79.030 and 70.79.040. 99-22-026, § 296-104-018, filed 10/26/99, effective 11/26/99. Statutory Authority: RCW 70.79.040. 92-11-070, § 296-104-018, filed 5/20/92, effective 6/20/92.]

296-104-020

Administration – What are the filing requirements for boilers and unfired pressure vessels before their installation/reinstallation?

A "boiler and pressure vessel installation/reinstallation permit," as defined in WAC [296-104-010](#) shall be submitted by the owner or agent and approved by the chief inspector.

[Statutory Authority: RCW 70.79.030, 70.79.040, 70.79.150, 70.79.290, 70.79.330, 70.79.350, and chapter 70.79 RCW. 02-23-036, § 296-104-020, filed 11/13/02, effective 12/14/02; 01-24-061, § 296-104-020, filed 11/30/01, effective 12/31/01. Statutory Authority: RCW 70.79.030 and 70.79.040. 99-22-026, § 296-104-020, filed 10/26/99, effective 11/26/99; 95-19-058, § 296-104-020, filed 9/15/95, effective 10/16/95; Order 74-37, § 296-104-020, filed 11/8/74; Part II, § 1, filed 3/23/60.]

296-104-021

Administration – What is the registration requirement for new standard boilers and unfired pressure vessels?

Manufacturers' data report for new "standard boilers and unfired pressure vessels" shall be registered with the National Board of Boiler and Pressure Vessel Inspectors.

[Statutory Authority: RCW 70.79.030, 70.79.040, 70.79.150, 70.79.290, 70.79.330, 70.79.350, and chapter 70.79 RCW. 02-23-036, § 296-104-021, filed 11/13/02, effective 12/14/02.]

296-104-025

Administration – What are the notification requirements following an accident involving a boiler or pressure vessel?

When an accident occurs which renders a boiler or unfired pressure vessel inoperative, the owner or user shall notify the chief inspector, and submit a detailed report of the accident. In cases of accidents, such as explosions or those resulting in personal injury, notice to the chief inspector shall be given immediately by telephone or electronic means designed to assure its earliest possible receipt. Neither the boiler or unfired pressure vessel nor any parts thereof shall be removed or disturbed before an inspection has been made by the chief inspector, or his designee except for the purpose of saving life or limiting consequential damage. The inspector making the investigation and inspection shall report to the chief inspector as soon as possible. The boiler or pressure vessel owner shall be responsible for all costs of the department's investigation.

[Statutory Authority: RCW 70.79.030 and 70.79.040. 99-22-026, § 296-104-025, filed 10/26/99, effective 11/26/99; 96-21-081, § 296-104-025, filed 10/16/96, effective 11/16/96; 95-19-058, § 296-104-025, filed 9/15/95, effective 10/16/95; Part II, § 2, filed 3/23/60.]

296-104-030

Administration – What is the penalty for operation of unsafe boilers or unfired pressure vessels?

In the event that a boiler or unfired pressure vessel is unsafe to operate, the inspection certificate shall be suspended. Any person, firm, partnership, or corporation causing such objects to be operated under pressure without a valid certificate of inspection shall be in violation of RCW 70.79.320 and subject to the penalties specified in WAC [296-104-701](#).

[Statutory Authority: RCW 70.79.030 and 70.79.040. 99-22-026, § 296-104-030, filed 10/26/99, effective 11/26/99; 95-19-058, § 296-104-030, filed 9/15/95, effective 10/16/95; Part II, § 3, filed 3/23/60.]

296-104-035

Administration – What are conflicts of interest for inspectors?

Inspectors commissioned by the state of Washington shall not engage in the sale of any service, article, or device or promote any other activity for personal gain relating to boilers or unfired pressure vessels or their appurtenances.

[Statutory Authority: RCW 70.79.030 and 70.79.040. 99-22-026, § 296-104-035, filed 10/26/99, effective 11/26/99; 95-19-058, § 296-104-035, filed 9/15/95, effective 10/16/95; Part II, § 4, filed 3/23/60.]

296-104-040

Administration – When should inspectors submit inspection reports and on what forms?

Inspectors shall submit reports of inspections of boilers and unfired pressure vessels on appropriate forms or media approved by the chief inspector. Routine reports of inspections shall be submitted within thirty days of inspection. Reports of reinspection after suspension of an inspection certificate shall be submitted by an inspector as soon as notice of corrective action has been received.

[Statutory Authority: RCW 70.79.030, 70.79.040, 70.79.150, 70.79.290, 70.79.330, 70.79.350, and chapter 70.79 RCW. 01-24-061, § 296-104-040, filed 11/30/01, effective 12/31/01. Statutory Authority: RCW 70.79.030 and 70.79.040. 99-22-026, § 296-104-040, filed 10/26/99, effective 11/26/99; 95-19-058, § 296-104-040, filed 9/15/95, effective 10/16/95; Order 74-37, § 296-104-040, filed 11/8/74; Part II, § 5, filed 3/23/60.]

296-104-045

Administration – What are the insurance companies' responsibilities?

All insurance companies shall notify the chief inspector within thirty days of all boiler and/or unfired pressure vessel risks written, canceled, not renewed or suspended because of unsafe conditions. Special inspectors shall perform all in-service inspections of boilers and unfired pressure vessels insured by their employer. After a repair or alteration the in-service inspector is responsible to assure that proper documentation is completed and submitted to the department in accordance with the rules of the National Board Inspection Code (NBIC) as adopted in WAC [296-104-102](#).

[Statutory Authority: RCW 70.79.030, 70.79.040, 70.79.150, 70.79.290, 70.79.330, 70.79.350, and chapter 70.79 RCW. 01-24-061, § 296-104-045, filed 11/30/01, effective 12/31/01. Statutory Authority: RCW 70.79.030 and 70.79.040. 99-22-026, § 296-104-045, filed 10/26/99, effective 11/26/99; 95-19-058, § 296-104-045, filed 9/15/95, effective 10/16/95; Part II, § 6, filed 3/23/60.]

296-104-050

Administration – What are the requirements for a boiler inspector?

In order to qualify as a prospective National Board Commissioned Inspector an applicant shall meet the minimum requirements as set forth in the national board's "Rules for Commissioned Inspectors," NB263, Revision 8 (4/02).

Application for examination for certificate of competency shall be in writing upon a form to be furnished by the chief inspector stating the school and education of the applicant, a list of employers, period of employment and position held with each employer. Applications containing willful falsification or untruthful statements shall be rejected.

If the applicant's history and experience meet with the approval of the board of boiler rules, the candidate shall be given the national board examination and the Washington state examination. If the applicant is accepted on the merits of these examinations or as provided for in WAC [296-104-065](#), a certificate of competency will be issued by the chief inspector.

Examinations shall be held at locations and times when considered necessary by the board of boiler rules. The examinations may be offered four times each year, namely, the first Wednesday and following Thursday of the months of March, June, September and December. Special examinations may be held when considered necessary by the board of boiler rules.

[Statutory Authority: Chapter 70.79 RCW. 04-21-069, § 296-104-050, filed 10/19/04, effective 1/1/05. Statutory Authority: RCW 70.79.030, 70.79.040, 70.79.150, 70.79.290, 70.79.330, 70.79.350, and chapter 70.79 RCW. 04-01-194, § 296-104-050, filed 12/24/03, effective 1/24/04; 02-23-036, § 296-104-050, filed 11/13/02, effective 12/14/02. Statutory Authority: RCW 70.79.030 and 70.79.040. 99-22-026, § 296-104-050, filed 10/26/99, effective 11/26/99. Statutory Authority: RCW 70.79.040. 94-21-002, § 296-104-050, filed 10/5/94, effective 11/5/94. Statutory Authority: Chapter 70.79 RCW. 89-15-025 (Order 89-05), § 296-104-050, filed 7/13/89, effective 8/13/89. Statutory Authority: RCW 70.79.030. 78-03-057 (Order 78-3), § 296-104-050, filed 2/22/78; Part II, § 7, filed 3/23/60.]

296-104-060

Administration – When shall an inspectors' Washington state commission be issued, suspended, or revoked?

The chief inspector shall issue a commission as a deputy or special inspector in accordance with RCW 70.79.120 and 70.79.130.

The deputy inspector commission shall be held by the chief inspector. The deputy inspector commission shall be valid for one year and may be renewed annually at the request of the chief inspector. The special inspector commission shall be held at the home office of the employing company and shall be valid for one year and may be renewed annually at the request of the employing company. Inspectors shall carry identifying commission cards while they are inspecting. The state or employing company shall return the commission and the identifying commission card at once to the chief inspector when the inspector to whom the commission was issued is no longer in its employ, or at the request of the chief inspector.

An inspector's commission may be suspended or revoked in accordance with RCW 70.79.180.

[Statutory Authority: RCW 70.79.030, 70.79.040, 70.79.150, 70.79.290, 70.79.330, 70.79.350, and chapter 70.79 RCW. 04-01-194, § 296-104-060, filed 12/24/03, effective 1/24/04; 02-23-036, § 296-104-060, filed 11/13/02, effective 12/14/02; 02-12-021, § 296-104-060, filed 5/28/02, effective 6/28/02; 01-24-061, § 296-104-060, filed 11/30/01, effective 12/31/01. Statutory Authority: RCW 70.79.030 and 70.79.040. 99-22-026, § 296-104-060, filed 10/26/99, effective 11/26/99. Statutory Authority: RCW 70.79.040. 94-21-002, § 296-104-060, filed 10/5/94, effective 11/5/94. Statutory Authority: RCW 70.79.030 and 70.79.330. 82-24-025 (Order 82-36), § 296-104-060, filed 11/23/82, effective 1/1/83; Order 74-37, § 296-104-060, filed 11/8/74; Part II, § 9, filed 3/23/60.]

296-104-065

Administration — How should an inspector obtain a Washington state commission?

A commission as a deputy inspector of boilers and/or unfired pressure vessels may be issued by the chief inspector to an inspector complying with WAC [296-104-065](#) (1) or (4). Upon the request of a boiler insurance company authorized to insure and insuring against loss from explosion of boilers and/or unfired pressure vessels in this state, or a company with an owner/user inspection agency, a commission as a special inspector of boilers and/or unfired pressure vessels shall be issued by the chief inspector to an inspector in the employ and supervision of such company provided the inspector has had the experience prescribed in chapter 70-79 RCW and complies with one of the following:

- (1) Passed an examination covering the Washington state boilers and unfired pressure vessels law, chapters 70.79 RCW and 296-104 WAC; and holds a national board commission.
- (2) Is certified by the American Petroleum Institute in accordance with API-510 for pressure vessel inspection, having passed an examination covering the Washington state boilers and unfired pressure vessels law, chapters 70.79 RCW and 296-104 WAC.
- (3) Is certified by the American Petroleum Institute in accordance with API-510 for pressure vessel inspection, and specifically and temporarily in the direct employ of an owner/user inspection agency as set forth in RCW 70.79.130. This inspector shall be exempted from the state examination requirement in WAC [296-104-065](#)(2).
- (4) Is an inspector holding the national board "A" endorsement and performs shop inspections only. This inspector shall be exempt from the exam requirement set forth in WAC [296-104-065](#)(1).

[Statutory Authority: RCW 70.79.030, 70.79.040, 70.79.150, 70.79.290, 70.79.330, 70.79.350, and chapter 70.79 RCW. 04-01-194, § 296-104-065, filed 12/24/03, effective 1/24/04; 01-24-061, § 296-104-065, filed 11/30/01, effective 12/31/01. Statutory Authority: RCW 70.79.030 and 70.79.040. 99-22-026, § 296-104-065, filed 10/26/99, effective 11/26/99; 96-21-081, § 296-104-065, filed 10/16/96, effective 11/16/96. Statutory Authority: RCW 70.79.040. 94-21-002, § 296-104-065, filed 10/5/94, effective 11/5/94. Statutory Authority: RCW 70.79.030. 78-03-057 (Order 78-3), § 296-104-065, filed 2/22/78; Order 74-37, § 296-104-065, filed 11/8/74; Part II, § 10, filed 3/23/60.]

296-104-100

Inspection – How often must boilers and unfired pressure vessels be inspected?

In accordance with RCW 70.79.080, 70.79.090, and 70.79.240 the following inspection requirements shall apply:

(1) **Power boilers** shall be inspected:

(a) Internally and externally while not under pressure - Annually.

(b) Externally while under pressure - Annually.

(2) **Organic vapor boilers** shall be inspected:

(a) Internally and externally while not under pressure - Biennially.

(b) Externally while under pressure - Annually.

(3) **Low pressure heating boilers** shall be inspected:

(a) Externally while in operation and under pressure - Biennially.

(b) Where construction permits, internally while not under pressure. Also, as a minimum, an internal of their low water fuel cutoff(s) must be completed, where construction permits - Biennially.

(4) **Hot water heaters** shall be inspected:

(a) Externally - Biennially.

(b) Internally - None required.

(5) **Unfired pressure vessels** shall be inspected:

(a) Externally - Biennially.

(b) Internally:

(i) When subject to corrosion and construction permits - Biennially. Vessels in an owner/user inspection program may follow intervals established by the NBIC or API-510 eighth edition with addenda, provided nondestructive examination (NDE) is performed at the biennial external inspection.

(ii) Pulp or paper dryer rolls may be inspected on a five-year basis in accordance with TAPPI TIP 0402-16 2001 edition, provided the owner has established a written inspection program accepted by the inspector that meets the minimum requirements of TAPPI TIP 0402-16 2001 edition.

(iii) Vessels not subject to corrosion do not require an internal.

[Statutory Authority: Chapter 70.79 RCW. 04-21-069, § 296-104-100, filed 10/19/04, effective 1/1/05. Statutory Authority: RCW 70.79.030, 70.79.040, 70.79.150, 70.79.290, 70.79.330, 70.79.350, and chapter 70.79 RCW. 04-01-194, § 296-104-100, filed 12/24/03, effective 1/24/04; 01-24-061, § 296-104-100, filed 11/30/01, effective 12/31/01. Statutory Authority: RCW 70.79.030 and 70.79.040. 99-22-026, § 296-104-100, filed 10/26/99, effective 11/26/99; 98-22-024, § 296-104-100, filed 10/28/98, effective 11/28/98; 95-19-058, § 296-104-100, filed 9/15/95, effective 10/16/95. Statutory Authority: RCW 70.79.040. 94-21-002, § 296-104-100, filed 10/5/94, effective 11/5/94; Part III, § 1, filed 3/23/60.]

296-104-102

Inspection – What are the standards for in-service inspection?

Where a conflict exists between the requirements of the standards listed below and this chapter, this chapter shall prevail.

(1) The standard for inspection of nonnuclear boilers, unfired pressure vessels, and safety devices is the National Board Inspection Code (NBIC), 2004 edition, with addenda. This code may be used on or after the date of issue and becomes mandatory twelve months after adoption by the board as specified in RCW 70.79.050(2).

(2) The standard for inspection of historical steam boilers of riveted construction preserved, restored, or maintained for hobby or demonstration use, shall be Appendix "C" of the National Board Inspection Code as referenced in subsection (1) of this section.

(3) The standard for inspection of nuclear items is ASME section XI. The applicable ASME Code edition and addenda shall be as specified in the owner in-service inspection program plan.

(4) Where a petroleum or chemical process industry owner/user inspection agency so chooses, the standard for inspection of unfired pressure vessels used by the owner shall be the API-510 Pressure Vessel Inspection Code, eighth edition, with addenda. This code may be used on or after the date of issue.

(5) TAPPI TIP 0402-16, dated 2001 may be used for both pulp dryers and paper machine dryers when requested by the owner. When requested by the owner, this document becomes a requirement and not a guideline.

[Statutory Authority: RCW 70.79.030, 70.79.040, 70.79.150, 70.79.290, 70.79.330, and 70.79.350. 05-22-092, § 296-104-102, filed 11/1/05, effective 1/1/06. Statutory Authority: Chapter 70.79 RCW. 04-21-069, § 296-104-102, filed 10/19/04, effective 1/1/05. Statutory Authority: RCW 70.79.030, 70.79.040, 70.79.150, 70.79.290, 70.79.330, 70.79.350, and chapter 70.79 RCW. 01-24-061, § 296-104-102, filed 11/30/01, effective 12/31/01. Statutory Authority: RCW 70.79.030 and 70.79.040. 99-22-026, § 296-104-102, filed 10/26/99, effective 11/26/99; 98-22-024, § 296-104-102, filed 10/28/98, effective 11/28/98; 96-21-081, § 296-104-102, filed 10/16/96, effective 11/16/96. Statutory Authority: RCW 70.79.040. 94-21-002, § 296-104-102, filed 10/5/94, effective 11/5/94.]

296-104-105

Inspection – How much time is required for notification of inspection?

Seven days will be considered sufficient notification. The owner or user shall prepare each boiler and unfired pressure vessel for internal inspection and shall prepare for and apply a hydrostatic pressure test whenever necessary on the date specified by the inspector.

[Statutory Authority: RCW 70.79.030 and 70.79.040. 99-22-026, § 296-104-105, filed 10/26/99, effective 11/26/99; 95-19-058, § 296-104-105, filed 9/15/95, effective 10/16/95; Part III, § 2, filed 3/23/60.]

296-104-110

Inspection – What will be done when boilers or unfired pressure vessels are deemed unsafe or defective?

Upon inspection of a boiler or unfired pressure vessel or appurtenances, if an inspector finds hazardous conditions such that it is unsafe to operate under pressure, remedial action shall be initiated at once. A red tag indicating "unsafe - do not use" shall be attached to the principle operating control and the owner or user advised that further operation is prohibited until specified repairs or other action are taken. The chief inspector shall be notified immediately, followed by a report on the condition. Any certificate in force is considered suspended. When reinspection establishes that necessary repairs have been made or corrective action taken so that the boiler or unfired pressure vessel is safe to operate, a report of reinspection shall be submitted to the chief inspector. The certificate of inspection will then be reinstated or a new certificate issued as appropriate.

If other defects, but not unsafe conditions, are found, a routine inspection report containing a noncompliance report shall be submitted to the chief inspector. The owner or user shall be allowed to operate the object for a period as specified by the inspector so long as corrective action is completed in the allotted time.

[Statutory Authority: RCW 70.79.030 and 70.79.040. 99-22-026, § 296-104-110, filed 10/26/99, effective 11/26/99; 95-19-058, § 296-104-110, filed 9/15/95, effective 10/16/95; Part III, § 3, filed 3/23/60.]

296-104-115

Inspection – What will be done when defective conditions are concealed by covering?

If upon an external inspection there is evidence of a leak or crack, enough of the covering of the boiler or unfired pressure vessel shall be removed to satisfy the inspector in order to determine the safety of the boiler or unfired pressure vessel. If the covering cannot be removed at the time, the inspector may order the operation of the boiler or unfired pressure vessel stopped until such time as the covering can be removed and proper examination made.

[Statutory Authority: RCW 70.79.030 and 70.79.040. 99-22-026, § 296-104-115, filed 10/26/99, effective 11/26/99; 95-19-058, § 296-104-115, filed 9/15/95, effective 10/16/95; Part III, § 4, filed 3/23/60.]

296-104-125

Inspection – What are the requirements for obtaining a certificate of inspection?

Before a certificate of inspection as defined in RCW 70.79.290 is issued, a boiler or unfired pressure vessel must be inspected by an inspector and have all necessary permits. In addition, the owner or user shall pay the fees scheduled in WAC [296-104-700](#) directly to the chief inspector. The inspection process is not complete until the certificate of inspection is posted.

If the owner or user of each boiler or unfired pressure vessel required to be inspected refuses to allow an inspection to be made, or refuses to pay the above fee, the certificate of inspection shall be suspended by the chief inspector until the owner or user complies with the requirements.

[Statutory Authority: RCW 70.79.030, 70.79.040, 70.79.150, 70.79.290, 70.79.330, 70.79.350, and chapter 70.79 RCW. 02-23-036, § 296-104-125, filed 11/13/02, effective 12/14/02.
Statutory Authority: RCW 70.79.030 and 70.79.040. 99-22-026, § 296-104-125, filed 10/26/99, effective 11/26/99; Part III, § 6, filed 3/23/60.]

296-104-130

Inspection – When are inspection certificates valid?

An inspection certificate, issued in accordance with RCW 70.79.290, shall be valid until expiration unless some defect or condition affecting the safety of the boiler or unfired pressure vessel is disclosed or the conditions of RCW 70.79.300 apply.

When an agreement exists between the state and the city jurisdictions of Spokane or Seattle, the certificates for portable boilers and unfired pressure vessels will be considered valid.

[Statutory Authority: RCW 70.79.030, 70.79.040, 70.79.150, 70.79.290, 70.79.330, 70.79.350, and chapter 70.79 RCW. 01-24-061, § 296-104-130, filed 11/30/01, effective 12/31/01.
Statutory Authority: RCW 70.79.030 and 70.79.040. 99-22-026, § 296-104-130, filed 10/26/99, effective 11/26/99; 95-19-058, § 296-104-130, filed 9/15/95, effective 10/16/95; Part III, § 7, filed 3/23/60.]

296-104-135

Inspection – What are the requirements for restamping of boilers and unfired pressure vessels?

When the stamping on a boiler or unfired pressure vessel becomes indistinct the inspector shall instruct the owner or user to have it restamped. Request for permission to restamp the boiler or unfired pressure vessel shall be made to the chief inspector and proof of the original stamping shall accompany the request. Restamping authorized by the chief inspector shall be done only in the presence of an inspector, and shall be identical with the original stamping except that it will not be required to restamp the code symbol. Notice of completion of such restamping shall be filed with the chief boiler inspector by the inspector who witnessed the restamping of the boiler or unfired pressure vessel together with a facsimile of the stamping applied.

[Statutory Authority: RCW 70.79.030 and 70.79.040. 99-22-026, § 296-104-135, filed 10/26/99, effective 11/26/99; 95-19-058, § 296-104-135, filed 9/15/95, effective 10/16/95; Part III, § 8, filed 3/23/60.]

296-104-140

Inspection — How should a state stamp be applied?

Upon completion of the installation, all boilers and unfired pressure vessels shall be inspected by an inspector as defined in WAC [296-104-010](#). At the time of this inspection, each boiler or unfired pressure vessel shall be marked with a serial number of the state of Washington followed by the letter "W." The marking should be conspicuously located and as close as possible to the boiler or unfired pressure vessel nameplate.

Washington special numbers when assigned by the chief inspector shall be a serial number of the state of Washington followed by the letters "WS."

All rental boilers used in the state of Washington shall be marked with the serial number of the state of Washington followed by the letters "WR." This will indicate that the boiler is a rental unit.

The state of Washington markings, numbers and letters, referenced above, shall not be less than 5/16 inches in height and shall not be concealed by lagging or paint and shall be exposed at all times.

[Statutory Authority: Chapter 70.79 RCW. 04-21-069, § 296-104-140, filed 10/19/04, effective 1/1/05. Statutory Authority: RCW 70.79.030, 70.79.040, 70.79.150, 70.79.290, 70.79.330, 70.79.350, and chapter 70.79 RCW. 02-23-036, § 296-104-140, filed 11/13/02, effective 12/14/02. Statutory Authority: RCW 70.79.030 and 70.79.040. 99-22-026, § 296-104-140, filed 10/26/99, effective 11/26/99; 96-21-081, § 296-104-140, filed 10/16/96, effective 11/16/96; 95-19-058, § 296-104-140, filed 9/15/95, effective 10/16/95; Order 73-1, § 296-104-140, filed 3/22/73; Part III, § 9, filed 3/23/60.]

296-104-145

Inspection — How are groups of vessels operating as a single unit classified?

A group of unfired pressure vessels operating as a single unit such as the vessels in a refrigeration system, evaporators, ironers and paper machines shall have an individual state serial number marked on each boiler or unfired pressure vessel. The marking should be conspicuously located and as close as possible to the boiler or unfired pressure vessel nameplate. The certificate of inspection fee shall be as outlined in WAC [296-104-700](#), for each vessel of the system.

[Statutory Authority: RCW 70.79.030, 70.79.040, 70.79.150, 70.79.290, 70.79.330, 70.79.350, and chapter 70.79 RCW. 02-23-036, § 296-104-145, filed 11/13/02, effective 12/14/02. Statutory Authority: RCW 70.79.030 and 70.79.040. 99-22-026, § 296-104-145, filed 10/26/99, effective 11/26/99; 95-19-058, § 296-104-145, filed 9/15/95, effective 10/16/95; Part III, § 10, filed 3/23/60.]

296-104-150

Inspection – How are unfired steam boilers classified?

Unfired steam boilers as defined in WAC [296-104-010](#) operating at pressures of 50 psi or more shall be inspected as power boilers. Unfired steam boilers operating at less than 50 psi shall be inspected as unfired pressure vessels.

[Statutory Authority: RCW 70.79.030, 70.79.040, 70.79.150, 70.79.290, 70.79.330, 70.79.350, and chapter 70.79 RCW. 02-23-036, § 296-104-150, filed 11/13/02, effective 12/14/02. Statutory Authority: RCW 70.79.030 and 70.79.040. 99-22-026, § 296-104-150, filed 10/26/99, effective 11/26/99; 95-19-058, § 296-104-150, filed 9/15/95, effective 10/16/95; Part III, § 11, filed 3/23/60.]

296-104-151

Inspection – What are the requirements for rental boilers?

Every rental boiler used in the state of Washington will have an internal inspection as defined in WAC [296-104-010](#) witnessed by an inspector once a year. An external inspection as defined in WAC [296-104-010](#) shall be witnessed by an inspector at each and every rental location before being placed into service. Rental boilers shall also meet the requirements of WAC [296-104-300](#).

A rental boiler, which has never been in rental service in the state of Washington, shall meet the requirements of WAC [296-104-273](#). Each inspection will be reported to the state of Washington in accordance with WAC [296-104-040](#), and a copy of this report will be posted on the rental boiler.

It is the responsibility of the rental boiler owner to arrange for all required inspections.

[Statutory Authority: RCW 70.79.030, 70.79.040, 70.79.150, 70.79.290, 70.79.330, 70.79.350, and chapter 70.79 RCW. 02-23-036, § 296-104-151, filed 11/13/02, effective 12/14/02; 01-24-061, § 296-104-151, filed 11/30/01, effective 12/31/01. Statutory Authority: RCW 70.79.030 and 70.79.040. 99-22-026, § 296-104-151, filed 10/26/99, effective 11/26/99; 96-21-081, § 296-104-151, filed 10/16/96, effective 11/16/96.]

296-104-155

Inspection – What preparations are necessary prior to internal inspections?

The owner or user shall prepare a boiler for internal inspection in the following manner or as required by the inspector:

- (1) Water shall be drawn off and the boiler thoroughly washed.
- (2) All manhole and handhole plates and wash-out plugs and water column connections shall be removed, the furnace and combustion chambers thoroughly cooled and cleaned.
- (3) All grates of internally fired boilers shall be removed.
- (4) At each annual inspection brickwork shall be removed as required by the inspector in order to determine the condition of the boiler headers, drums, furnace, supports, or other parts.

(5) The steam gauge shall be removed for testing or evidence of testing shown.

(6) Any leakage of steam or water into the boiler shall be prevented by either disconnecting the pipe or block valve at the most convenient point or installing isolation blinds.

(7) The low water cutout shall be disassembled to such a degree as the inspector shall require.

Unfired pressure vessels shall be prepared for internal inspection to the extent deemed necessary by the inspector.

[Statutory Authority: RCW 70.79.030, 70.79.040, 70.79.150, 70.79.290, 70.79.330, 70.79.350, and chapter 70.79 RCW. 02-23-036, § 296-104-155, filed 11/13/02, effective 12/14/02.
Statutory Authority: RCW 70.79.030 and 70.79.040. 99-22-026, § 296-104-155, filed 10/26/99, effective 11/26/99; 95-19-058, § 296-104-155, filed 9/15/95, effective 10/16/95; Part III, § 12, filed 3/23/60.]

296-104-160

Inspection – What happens if a boiler or unfired pressure vessel is improperly prepared for inspection?

If a boiler or unfired pressure vessel has not been properly prepared for an internal inspection, or the owner or user fails to comply with the requirements for hydrostatic test as set forth in these rules, the inspector may decline to make the inspection or test and the certificate of inspection shall be withheld until the owner or user complies with the requirements.

[Statutory Authority: RCW 70.79.030 and 70.79.040. 99-22-026, § 296-104-160, filed 10/26/99, effective 11/26/99; 95-19-058, § 296-104-160, filed 9/15/95, effective 10/16/95; Part III, § 13, filed 3/23/60.]

296-104-165

Inspection – When should coverings be removed for inspection?

If the boiler or unfired pressure vessel is jacketed such that the longitudinal seams of shells, drums, or domes cannot be seen, or if pertinent information cannot be determined by other means, the following may be ordered by the inspector: Enough of the jacketing, setting wall, or other form of casing or housing shall be removed so that information necessary to determine the safety of the boiler or unfired pressure vessel can be obtained to the satisfaction of the inspector.

[Statutory Authority: RCW 70.79.030 and 70.79.040. 99-22-026, § 296-104-165, filed 10/26/99, effective 11/26/99; 95-19-058, § 296-104-165, filed 9/15/95, effective 10/16/95; Part III, § 14, filed 3/23/60.]

296-104-170

Inspection – When are shop inspections required?

Shop inspections shall be as required in the standards of construction as adopted in WAC [296-104-200](#). Only inspectors holding a national board commission with the appropriate endorsements and a commission issued by the state of Washington shall make shop inspections in this state. Supervisors of inspectors who perform shop inspections in the state need only a National Board Commission with the appropriate endorsements.

Upon request from a boiler or pressure vessel manufacturer holding an ASME Certificate of Authorization within the jurisdiction, the department shall provide inspection services as required by the ASME Code. The manufacturer receiving such inspection services shall reimburse the department for the time and expenses in accordance with the fee schedule established in WAC [296-104-700](#).

[Statutory Authority: RCW 70.79.030, 70.79.040, 70.79.150, 70.79.290, 70.79.330, 70.79.350, and chapter 70.79 RCW. 02-23-036, § 296-104-170, filed 11/13/02, effective 12/14/02. Statutory Authority: RCW 70.79.030 and 70.79.040. 99-22-026, § 296-104-170, filed 10/26/99, effective 11/26/99; 96-21-081, § 296-104-170, filed 10/16/96, effective 11/16/96. Statutory Authority: RCW 70.79.040. 90-20-029, § 296-104-170, filed 9/24/90, effective 10/25/90. Statutory Authority: RCW 70.79.030. 78-03-057 (Order 78-3), § 296-104-170, filed 2/22/78; Part III, § 15, filed 3/23/60.]

296-104-180

Inspection – How are radioactive systems inspected?

An alternative means of inspection is allowed when a pressure vessel has radioactive contamination that would not allow entering for visual inspection. The inspector and owner shall work out a program of nondestructive examination that shall ascertain the condition of the vessel to assure its integrity.

[Statutory Authority: RCW 70.79.030 and 70.79.040. 98-22-024, § 296-104-180, filed 10/28/98, effective 11/28/98.]

296-104-200

Construction – What are the standards for new construction?

The standards for new construction are:

(1) ASME Boiler and Pressure Vessel Code, 2004 edition, with addenda Sections I, III, IV, VIII, Division 1, 2, 3, X, XII;

(2) ASME PVHO-1 2002-2003 Safety Standard for Pressure Vessels for Human Occupancy; and

(3) ASME CSD-1 2002 edition with addenda (as referenced in WAC [296-104-302](#)); and

(4) NFPA 85 Boiler and Combustion Systems Hazards Code 2004 edition (for use with boilers with fuel input ratings of 12, 500,000 BTU/hr) or greater; and

(5) Standards of construction approved by the chief inspector and meeting the National Board Criteria for Registration of Boilers, Pressure Vessels and Other Pressure Retaining Items.

These codes and standards may be used on or after the date of issue and become mandatory twelve months after adoption by the board as specified in RCW 70.79.050(2). ASME Code Cases may be approved for use when accepted by the chief inspector. The board recognizes that the ASME Code states that new editions of the code become mandatory on issue and that subsequent addenda become mandatory six months after the date of issue. For nuclear systems, components and parts the time period for addenda becoming mandatory is defined in the Code of Federal Regulations.

[Statutory Authority: RCW 70.79.030, 70.79.040, 70.79.150, 70.79.290, 70.79.330, and 70.79.350. 05-22-092, § 296-104-200, filed 11/1/05, effective 1/1/06. Statutory Authority: Chapter 70.79 RCW. 04-21-069, § 296-104-200, filed 10/19/04, effective 1/1/05. Statutory Authority: RCW 70.79.030, 70.79.040, 70.79.150, 70.79.290, 70.79.330, 70.79.350, and chapter 70.79 RCW. 02-23-036, § 296-104-200, filed 11/13/02, effective 12/14/02; 01-24-061, § 296-104-200, filed 11/30/01, effective 12/31/01. Statutory Authority: RCW 70.79.030, 70.79.040 and chapter 70.79 RCW. 00-21-024, § 296-104-200, filed 10/10/00, effective 11/13/00. Statutory Authority: RCW 70.79.030 and 70.79.040. 98-22-024, § 296-104-200, filed 10/28/98, effective 11/28/98; 97-20-109, § 296-104-200, filed 9/30/97, effective 10/31/97; 96-21-081, § 296-104-200, filed 10/16/96, effective 11/16/96. Statutory Authority: RCW 70.79.040. 93-12-014, § 296-104-200, filed 5/21/93, effective 6/21/93; 92-11-070, § 296-104-200, filed 5/20/92, effective 6/20/92; 91-11-107, § 296-104-200, filed 5/22/91, effective 6/22/91; 90-04-009, § 296-104-200, filed 1/26/90, effective 2/26/90. Statutory Authority: RCW 70.79.040 and 70.79.050. 86-01-088 (Order 85-26), § 296-104-200, filed 12/19/85. Statutory Authority: RCW 70.79.030 and 70.79.330. 84-11-016 (Order 84-09), § 296-104-200, filed 5/10/84; 82-24-025 (Order 82-36), § 296-104-200, filed 11/23/82, effective 1/1/83. Statutory Authority: RCW 70.79.030. 82-05-003 (Order 82-2), § 296-104-200, filed 2/4/82; 81-12-012 (Order 81-10), § 296-104-200, filed 5/28/81; 81-01-114 (Order 80-28), § 296-104-200, filed 12/24/80; 80-05-065 (Order 80-7), § 296-104-200, filed 4/23/80; 79-05-054 (Order 79-7), § 296-104-200, filed 4/30/79; 78-10-096 (Order 78-19), § 296-104-200, filed 10/3/78; Order 77-23, § 296-104-200, filed 11/8/77; Order 77-9, § 296-104-200, filed 5/26/77; Order 75-35, § 296-104-200, filed 10/29/75; Order 74-37, § 296-104-200, filed 11/8/74; Order 73-1, § 296-104-200, filed 3/22/73; Order 72-17, § 296-104-200, filed 9/28/72; Order 72-11, § 296-104-200, filed 7/7/72; Part IV, § 1, filed 3/23/60.]

296-104-205

Construction – What are the requirements for nonstandard new construction?

Those boilers and unfired pressure vessels that are exempted by the codes adopted in WAC [296-104-200](#) due to volume, temperature or pressure requirements, and are not to be constructed to those codes, must be certified to a nationally recognized testing agency or constructed to WAC [296-104-230](#). See WAC [296-104-307](#) for safety pressure relief devices.

Other boilers and unfired pressure vessels that are not to be constructed to the codes adopted in WAC [296-104-200](#) may be treated as special designs at the discretion of the board. Nonstandard construction shall not be permitted to avoid standard construction.

[Statutory Authority: RCW 70.79.030, 70.79.040, 70.79.150, 70.79.290, 70.79.330, 70.79.350, and chapter 70.79 RCW. 01-24-061, § 296-104-205, filed 11/30/01, effective 12/31/01. Statutory Authority: RCW 70.79.030, 70.79.040 and chapter 70.79 RCW. 00-21-024, § 296-104-205, filed 10/10/00, effective 11/13/00. Statutory Authority: RCW 70.79.030 and 70.79.040. 96-21-081, § 296-104-205, filed 10/16/96, effective 11/16/96; Part IV, § 2, filed 3/23/60.]

296-104-210

Construction – What are the requirements for construction of boilers and unfired pressure vessels of special design?

Boilers and unfired pressure vessels of special design require a special certificate granted by the board of boiler rules. At a minimum the following information shall be supplied to obtain board approval for special designs: Construction drawings, design calculations, material specifications, and a Washington state professional engineer's evaluation of the design. Upon board approval a Washington special number will be assigned by the chief inspector. The installation will be subject to the regular inspections required by WAC [296-104-100](#) and any additional conditions as required by the board.

[Statutory Authority: RCW 70.79.030, 70.79.040, 70.79.150, 70.79.290, 70.79.330, and 70.79.350. 05-22-092, § 296-104-210, filed 11/1/05, effective 1/1/06. Statutory Authority: RCW 70.79.030, 70.79.040 and chapter 70.79 RCW. 00-21-024, § 296-104-210, filed 10/10/00, effective 11/13/00. Statutory Authority: RCW 70.79.030 and 70.79.040. 96-21-081, § 296-104-210, filed 10/16/96, effective 11/16/96. Statutory Authority: RCW 70.79.040 and 70.79.050. 86-07-064 (Order 86-02), § 296-104-210, filed 3/19/86; Order 73-1, § 296-104-210, filed 3/22/73; Part IV, § 3, filed 3/23/60.]

296-104-215

Construction – What are the requirements to use nonstandard boilers and unfired pressure vessels constructed prior to January 1, 1952?

Nonstandard boilers and unfired pressure vessels constructed prior to January 1, 1952, may be used provided they have not been moved from their original setting since January 1, 1952.

[Statutory Authority: RCW 70.79.030, 70.79.040 and chapter 70.79 RCW. 00-21-024, § 296-104-215, filed 10/10/00, effective 11/13/00. Statutory Authority: RCW 70.79.030 and 70.79.040. 97-20-109, § 296-104-215, filed 9/30/97, effective 10/31/97; 96-21-081, § 296-104-215, filed 10/16/96, effective 11/16/96; Part IV, § 4, filed 3/23/60.]

296-104-220

Construction – What are the requirements to use nonstandard second hand boilers and unfired pressure vessels?

Nonstandard second hand boilers and unfired pressure vessels constructed after January 1, 1952, cannot be used in this state without prior approval of the board of boiler rules. At a minimum the following information shall be supplied to obtain board approvals: Construction drawings, photographs, operating and inspection history, design calculations, and a Washington state professional engineer's evaluation of the design and present condition. Upon board approval a Washington special number will be assigned by the chief inspector. The installation will be subject to the regular inspections required by WAC [296-104-100](#) and any additional conditions as required by the board.

[Statutory Authority: RCW 70.79.030, 70.79.040, 70.79.150, 70.79.290, 70.79.330, and 70.79.350. 05-22-092, § 296-104-220, filed 11/1/05, effective 1/1/06. Statutory Authority: RCW 70.79.030, 70.79.040 and chapter 70.79 RCW. 00-21-024, § 296-104-220, filed 10/10/00, effective 11/13/00. Statutory Authority: RCW 70.79.030 and 70.79.040. 96-21-081, § 296-104-220, filed 10/16/96, effective 11/16/96. Statutory Authority: RCW 70.79.240. 88-01-064 (Order 87-25), § 296-104-220, filed 12/17/87; Part IV, § 5, filed 3/23/60.]

296-104-230

Construction – What are the testing requirements for new boilers or unfired pressure vessels exempted from code requirements for volume, pressure or temperature?

Boilers or unfired pressure vessels that are not required by the codes adopted in WAC [296-104-200](#) to be built to those codes (except those exempted in the RCWs), shall be tested as follows:

One boiler or unfired pressure vessel of each design and size taken from the manufacturer's stock at random, shall be subjected to a hydrostatic test of twice the rated maximum allowable working pressure in the presence of an inspector holding a national board commission. The boiler or unfired pressure vessel shall withstand the hydrostatic pressure test without leaks and without exceeding 80% of the boiler or unfired pressure vessel material's yield strength. Samples shall be taken from the longitudinal seam and tests made as outlined in Section IX ASME Code for root and face bends and reduced tensile coupons. Upon successfully passing the above tests, the maximum allowable working pressure will be allowed for all boilers or unfired pressure vessels constructed to identical specifications. The company name, serial number, maximum allowable working pressure, and energy input (if applicable) shall be stamped or marked in a permanent manner on each boiler or unfired pressure vessel. A retest shall be made at the inspector's discretion or by the request of the chief inspector. Any unfired pressure vessels containing water and an air cushion designed for less than 300 psi and 210 degree F, in use prior to January 1, 1997, may be accepted by hydrostatically testing them to twice their maximum allowable working pressure.

[Statutory Authority: RCW 70.79.030, 70.79.040, 70.79.150, 70.79.290, 70.79.330, 70.79.350, and chapter 70.79 RCW. 02-23-036, § 296-104-230, filed 11/13/02, effective 12/14/02. Statutory Authority: RCW 70.79.030, 70.79.040 and chapter 70.79 RCW. 00-21-024, § 296-104-230, filed 10/10/00, effective 11/13/00. Statutory Authority: RCW 70.79.030 and 70.79.040. 96-21-081, § 296-104-230, filed 10/16/96, effective 11/16/96; Order 74-37, § 296-104-230, filed 11/8/74; Part IV, § 7, filed 3/23/60.]

296-104-235

Construction – What are the requirements for code exempted boiler and unfired pressure vessel safety relief valves?

The boilers and unfired pressure vessels covered by WAC [296-104-230](#) shall be protected by the installation of ASME Code relief valves with trial levers, set pressure not to exceed the boiler's or the unfired pressure vessel's design pressure. Relief valves shall be installed on top of the boiler or the unfired pressure vessel or on outlet piping as close as possible to the boiler or unfired pressure vessel, with a minimum of fittings and no valves intervening. The outlet of the relief valve shall be run full size to a safe place and shall not induce stress on the valve.

[Statutory Authority: RCW 70.79.030, 70.79.040 and chapter 70.79 RCW. 00-21-024, § 296-104-235, filed 10/10/00, effective 11/13/00. Statutory Authority: RCW 70.79.030 and 70.79.040. 96-21-081, § 296-104-235, filed 10/16/96, effective 11/16/96. Statutory Authority: RCW 70.79.030. 78-03-057 (Order 78-3), § 296-104-235, filed 2/22/78; Part IV, § 8, filed 3/23/60.]

296-104-245

Construction – Combustible fluid heaters.

Steam or hot water combustible fluid heaters shall be so designed and constructed that in the event of failure of any part, the combustible fluid cannot enter the boiler water.

[Statutory Authority: RCW 70.79.030 and 70.79.040. 96-21-081, § 296-104-245, filed 10/16/96, effective 11/16/96. Statutory Authority: RCW 70.79.030. 78-03-057 (Order 78-3), § 296-104-245, filed 2/22/78; Part IV, § 10, filed 3/23/60.]

296-104-255

Installation – Clearance at top of boilers.

When boilers are replaced or new boilers installed in either existing or new buildings, a minimum clearance as specified below shall be provided between the top of boiler proper and ceiling:

(1) Power boilers having a steam generating capacity in excess of 5,000 pounds per hour or having a heating surface in excess of 1,000 sq. ft. or input in excess of 5,000,000 btu per hour. Clearance shall be 7 feet.

(2) Low pressure heating boilers which exceed any one of the following limits: 5,000,000 btu input; 5,000 lbs. steam per hour capacity or 1,000 sq. ft. heating surface; and power boilers which do not exceed any of the following limits: 5,000,000 btu input; 5,000 lbs. steam per hour capacity or 1,000 sq. ft. heating surface; and all boilers with manholes on top of boiler except those described in paragraph (1) above 3 feet.

(3) Low pressure heating boilers which do not exceed the above limits and miniature boilers 2 feet.

[Statutory Authority: RCW 70.79.030 and 70.79.040. 96-21-081, § 296-104-255, filed 10/16/96, effective 11/16/96; Part IV, § 12, filed 3/23/60.]

296-104-256

Installation – What are the required clearances for boilers?

When boilers are replaced or new boilers installed in either existing or new buildings, sufficient access must be provided for inspection, maintenance, operation, and repair. As a minimum clearance at sides, front and back wall shall be the manufacturers' recommendations, but in no case less than eighteen inches. Boilers having manholes shall have five feet clearance from the manhole opening and any wall, ceiling, or piping that will prevent a person from entering the boiler.

[Statutory Authority: RCW 70.79.030, 70.79.040, 70.79.150, 70.79.290, 70.79.330, 70.79.350, and chapter 70.79 RCW. 04-01-194, § 296-104-256, filed 12/24/03, effective 1/24/04; 02-23-036, amended and recodified as § 296-104-256, filed 11/13/02, effective 12/14/02. Statutory Authority: RCW 70.79.030 and 70.79.040. 96-21-081, § 296-104-260, filed 10/16/96, effective 11/16/96. Statutory Authority: Chapter 70.79 RCW. 89-15-025 (Order 89-05), § 296-104-260, filed 7/13/89, effective 8/13/89; Part IV, § 13, filed 3/23/60.]

296-104-260

Installation – What are the required clearances for unfired pressure vessels?

When unfired pressure vessels are replaced or new vessels are installed in either existing or new buildings, manufacturers' recommendations shall be used, but in no case less than eighteen inches shall be provided between the top of the unfired pressure vessel and the ceiling and adjacent walls or other structures. All unfired pressure vessels having manholes shall have five feet clearance from manhole openings and any wall, ceiling, or piping that will prevent a person from entering the unfired pressure vessel.

[Statutory Authority: RCW 70.79.030, 70.79.040, 70.79.150, 70.79.290, 70.79.330, 70.79.350, and chapter 70.79 RCW. 02-23-036, amended and recodified § 296-104-260, filed 11/13/02, effective 12/14/02. Statutory Authority: RCW 70.79.030 and 70.79.040. 96-21-081, § 296-104-273, filed 10/16/96, effective 11/16/96.]

296-104-265

Installation – What are the requirements for unfired pressure vessels installed underground?

Unfired pressure vessels installed underground shall comply with the following requirements:

- (1) A pit with concrete or masonry sides and floor shall enclose the underground portion of the unfired pressure vessel.
- (2) Pit covers shall be removable.
- (3) Clearances shall be as required by WAC [296-104-260](#).

[Statutory Authority: RCW 70.79.030, 70.79.040, 70.79.150, 70.79.290, 70.79.330, 70.79.350, and chapter 70.79 RCW. 04-01-194, § 296-104-265, filed 12/24/03, effective 1/24/04; 02-23-036, recodified as § 296-104-265, filed 11/13/02, effective 12/14/02. Statutory Authority: RCW 70.79.030 and 70.79.040. 97-20-109, § 296-104-320, filed 9/30/97, effective 10/31/97; Part V, § 5, filed 3/23/60.]

296-104-271

Installation – How does an owner, user, or installers obtain a variance from clearances?

Variances from WAC [296-104-255](#), [296-104-256](#), [296-104-260](#), and [296-104-265](#) may be requested. The variance request shall be in writing on an appropriate form approved by the chief inspector, and shall specify how equivalent safety is to be maintained. The chief inspector may grant the variance provided that safety and accessibility for inspections are acceptable.

[Statutory Authority: RCW 70.79.030, 70.79.040, 70.79.150, 70.79.290, 70.79.330, 70.79.350, and chapter 70.79 RCW. 02-23-036, § 296-104-271, filed 11/13/02, effective 12/14/02.]

296-104-273

Installation – What inspections are required for reinstalled standard boilers or unfired pressure vessels?

When a stationary standard boiler or unfired pressure vessel is moved and reinstalled it must be inspected by an inspector. The following will be required:

(1) The fittings and appliances must comply with the latest codes adopted in WAC [296-104-200](#).

(2) An installation permit must be submitted in accordance with WAC [296-104-020](#).

(3) For any boiler or unfired pressure vessel the following are required to be documented and submitted:

(a) A hydrostatic test up to 150% of the maximum allowable working pressure, MAWP.

(b) An internal inspection.

(c) An operational test.

(d) Any repairs deemed necessary.

(e) A complete history of inspection, operation and repairs.

(4) The following are required unless waived by the inspector:

(a) Additional examination or nondestructive testing.

(b) A written evaluation by a professional engineer knowledgeable with boilers and pressure vessels, an ASME certificate holder, or a National Board R certificate holder.

[Statutory Authority: RCW 70.79.030, 70.79.040, 70.79.150, 70.79.290, 70.79.330, 70.79.350, and chapter 70.79 RCW. 02-23-036, recodified as § 296-104-273, filed 11/13/02, effective 12/14/02; 01-24-061, § 296-104-256, filed 11/30/01, effective 12/31/01. Statutory Authority: RCW 70.79.030 and 70.79.040. 96-21-081, § 296-104-256, filed 10/16/96, effective 11/16/96.]

296-104-295

Installation – What are the requirements for an explosion door?

Provide substantial deflectors to divert the blast when explosion doors are located within seven feet of the firing floor or an operating platform.

[Statutory Authority: RCW 70.79.030, 70.79.040, 70.79.150, 70.79.290, 70.79.330, 70.79.350, and chapter 70.79 RCW. 02-23-036, recodified as § 296-104-295, filed 11/13/02, effective 12/14/02. Statutory Authority: RCW 70.79.030 and 70.79.040. 97-20-109, § 296-104-270, filed 9/30/97, effective 10/31/97; Part IV, § 15, filed 3/23/60.]

296-104-300

Installation – What control and limit devices are required on automatically fired boilers prior to June 1989?

All automatically fired steam, vapor, or hot water boilers except boilers having a constant attendant who has no other duties while the boiler is in operation, shall be equipped with:

- (1) An automatic low-water fuel cutoff; and
- (2) An automatic water feeding device.
- (3) All devices shall be designed so that they may be readily tested at frequent intervals.

[Statutory Authority: Chapter 70.79 RCW. 04-21-069, § 296-104-300, filed 10/19/04, effective 1/1/05. Statutory Authority: RCW 70.79.030, 70.79.040, 70.79.150, 70.79.290, 70.79.330, 70.79.350, and chapter 70.79 RCW. 04-01-194, § 296-104-300, filed 12/24/03, effective 1/24/04; 02-23-036, recodified as § 296-104-300, filed 11/13/02, effective 12/14/02; 01-24-061, § 296-104-265, filed 11/30/01, effective 12/31/01. Statutory Authority: RCW 70.79.030, 70.79.040 and chapter 70.79 RCW. 00-21-024, § 296-104-265, filed 10/10/00, effective 11/13/00. Statutory Authority: RCW 70.79.030 and 70.79.040. 98-22-024, § 296-104-265, filed 10/28/98, effective 11/28/98; 97-20-109, § 296-104-265, filed 9/30/97, effective 10/31/97. Statutory Authority: RCW 70.79.240. 88-01-064 (Order 87-25), § 296-104-265, filed 12/17/87; Part IV, § 14, filed 3/23/60.]

296-104-301

Installation – What control and limit devices are required on automatically fired boilers after June 1989?

In addition to those requirements listed in WAC [296-104-300](#), the following are also required:

(1) All boilers that are automatically fired low pressure steam heating boilers, small power boilers, and power steam boilers without a constant attendant who has no other duties shall be equipped with:

(a) Two high steam pressure limit controls, the highest of which shall be provided with a manual reset.

(b) Two low-water fuel cutoffs, one of which shall be provided with a manual reset device and independent of the feed water controller.

(c) Coil type flash steam boilers may use two high-temperature limit controls, one of which shall have a manual reset. This is instead of the low-water fuel cutoff.

(d) All control and limit devices shall be independently connected and electrically wired in series.

(2) All automatically fired hot water supply, low-pressure hot water heating boilers and power hot water boilers shall be equipped with:

(a) Two high-temperature limit controls, the highest of which shall be provided with a manual reset.

(b) One low-water fuel cutoff with a manual reset and independent of the feed water controller.

(c) For coil type hot water boilers a low-water flow limit control installed in the circulating water line may be used instead of a low-water fuel cutoff.

(d) All control and limit devices shall be independently connected and electrically wired in series.

[Statutory Authority: Chapter 70.79 RCW. 04-21-069, § 296-104-301, filed 10/19/04, effective 1/1/05.]

296-104-302

Installation — What control and limit devices are required on automatically fired boilers after December 1998?

In addition to those requirements listed in WAC [296-104-301](#), the following are also required with regard to installations or refits of gas, oil, or combinations of gas or oil:

(1) All boilers installed or refitted after December 1998, with fuel input ratings of less than 12,500,000 BTU/hr which are fired by gas, oil, or a combination of gas or oil shall comply with the fuel train requirements defined in ASME CSD-1 (CF), as adopted in WAC [296-104-200](#) where applicable.

(2) Verification of fuel train compliance will be per CSD-1. A CSD-1 report will be completed and signed by an authorized representative of the manufacturer and/or the installing contractor.

(3) The CSD-1 report must be made available to the authorized inspection agency or the inspector after which a certificate of operation may be issued. The report shall remain in the possession of the boiler owner.

[Statutory Authority: RCW 70.79.030, 70.79.040, 70.79.150, 70.79.290, 70.79.330, and 70.79.350. 05-22-092, § 296-104-302, filed 11/1/05, effective 1/1/06. Statutory Authority: Chapter 70.79 RCW. 04-21-069, § 296-104-302, filed 10/19/04, effective 1/1/05.]

296-104-303

Installation – What control and limit devices are required on automatically fired boilers after December 2004?

In addition to those requirements listed in WAC [296-104-302](#), the following are also required with regard to installations or refits of gas, oil, or combinations of gas or oil:

(1) A manually operated remote shutdown switch or circuit breaker should be located just outside the boiler room door and marked for easy identification. Consideration should be given to the type and location of the switch to safeguard against tampering. If the boiler room door is on the building exterior, the switch should be located just inside the door. If there is more than one door to the boiler room, there should be a switch located at each door.

(2) A means shall be provided for testing the operation of hot water heating boiler low-water fuel cutoff(s) without resorting to draining the entire system. Such means shall not render the device(s) inoperable. If the means temporarily isolates the device from the boiler during testing, it shall automatically return to its normal position.

[Statutory Authority: Chapter 70.79 RCW. 04-21-069, § 296-104-303, filed 10/19/04, effective 1/1/05.]

296-104-307

Installation – When are platforms around boilers required?

Provide platforms allowing safe access to each boiler, when the controls, valves, manholes, or casing openings are over ten feet above the floor.

[Statutory Authority: RCW 70.79.030, 70.79.040, 70.79.150, 70.79.290, 70.79.330, 70.79.350, and chapter 70.79 RCW. 04-01-194, § 296-104-307, filed 12/24/03, effective 1/24/04; 02-23-036, recodified as § 296-104-307, filed 11/13/02, effective 12/14/02. Statutory Authority: RCW 70.79.030 and 70.79.040. 97-20-109, § 296-104-300, filed 9/30/97, effective 10/31/97; Part V, § 1, filed 3/23/60.]

296-104-310

Installation – How many exits are required in boiler rooms?

(1) For boiler rooms containing a boiler or a combination of boilers of over 2,000 square feet of heating surface, provide at least two exits on opposite sides of the boiler(s).

(2) Each floor elevation change of 10 feet or more must have two exits from that elevation.

(3) All exits shall meet Washington state building codes or local building codes as applicable.

[Statutory Authority: RCW 70.79.030, 70.79.040, 70.79.150, 70.79.290, 70.79.330, 70.79.350, and chapter 70.79 RCW. 02-23-036, recodified as § 296-104-310, filed 11/13/02, effective 12/14/02. Statutory Authority: RCW 70.79.030 and 70.79.040. 97-20-109, § 296-104-305, filed 9/30/97, effective 10/31/97; Part V, § 2, filed 3/23/60.]

296-104-316

Installation – What safety pressure relief devices are required on boilers and unfired pressure vessels?

All boiler and unfired pressure vessels shall be safeguarded by safety valves, safety relief valves, or rupture discs as specified in the ASME Code. As an alternative they may be safeguarded by a fail safe pressure relief control system that is evaluated by a professional engineer knowledgeable with boilers and pressure vessels, licensed by the state of Washington, and accepted by the chief inspector.

[Statutory Authority: RCW 70.79.030, 70.79.040, 70.79.150, 70.79.290, 70.79.330, 70.79.350, and chapter 70.79 RCW. 04-01-194, § 296-104-316, filed 12/24/03, effective 1/24/04; 02-23-036, recodified as § 296-104-316, filed 11/13/02, effective 12/14/02. Statutory Authority: RCW 70.79.030, 70.79.040 and chapter 70.79 RCW. 00-21-024, § 296-104-307, filed 10/10/00, effective 11/13/00. Statutory Authority: RCW 70.79.030 and 70.79.040. 98-22-024, § 296-104-307, filed 10/28/98, effective 11/28/98.]

296-104-320

Installation – Where should the discharge from safety pressure relief devices, blow offs and drains be directed?

Discharge from safety pressure relief devices, blow offs and drains shall be directed to a safe point of discharge to prevent injury to personnel and property. Discharge lines from boilers, accumulators, or headers, with a capacity of 1,000 pounds of steam per hour or more, shall be directed outside of the building.

[Statutory Authority: RCW 70.79.030, 70.79.040, 70.79.150, 70.79.290, 70.79.330, 70.79.350, and chapter 70.79 RCW. 04-01-194, § 296-104-320, filed 12/24/03, effective 1/24/04; 02-23-036, recodified as § 296-104-320, filed 11/13/02, effective 12/14/02. Statutory Authority: RCW 70.79.030 and 70.79.040. 98-22-024, § 296-104-310, filed 10/28/98, effective 11/28/98; 97-20-109, § 296-104-310, filed 9/30/97, effective 10/31/97; Part V, § 3, filed 3/23/60.]

296-104-325

Installation – What are the requirements for boiler and unfired pressure vessel supports?

Each boiler or unfired pressure vessel shall be supported by masonry or structural supports of sufficient strength and rigidity to safely support the vessel and its contents. There shall be no excessive vibration in either the vessel or its connecting piping.

[Statutory Authority: RCW 70.79.030, 70.79.040, 70.79.150, 70.79.290, 70.79.330, 70.79.350, and chapter 70.79 RCW. 04-01-194, § 296-104-325, filed 12/24/03, effective 1/24/04. Statutory Authority: RCW 70.79.030 and 70.79.040. 97-20-109, § 296-104-325, filed 9/30/97, effective 10/31/97; Part V, § 6, filed 3/23/60.]

296-104-330

Installation – What are the relief or safety valve requirements when pressure reducing valves are used?

(1) Where pressure reducing valves are used, one or more relief or safety valve(s) and pressure gauge(s) shall be provided on the low pressure side of the reducing valve. The relief or safety valve(s) shall be located as close as possible to the reducing valve. The combined discharge capacity of the relief valves shall be such that the pressure rating of the lower pressure piping or equipment shall not be exceeded in case the reducing valve sticks open. Discharge lines shall comply with WAC [296-104-310](#).

(2) The use of hand-controlled bypasses around reducing valves is permissible. The bypass shall not be greater in capacity than the reducing valve unless the piping or equipment is adequately protected by a relief valve(s) or meets the requirements of the high pressure system.

[Statutory Authority: RCW 70.79.030 and 70.79.040. 97-20-109, § 296-104-330, filed 9/30/97, effective 10/31/97; Part V, § 7, filed 3/23/60.]

296-104-405

Existing installation – How can the maximum allowable working pressure be established for nonstandard boilers or unfired pressure vessels?

The maximum allowable working pressure MAWP of cylindrical components under internal pressure shall be established as follows:

(1) For nonstandard steel low pressure steam heating boilers the MAWP shall be computed from the formula in subsection (5) of this section not exceeding 15 psi steam.

(2) For nonstandard steel low pressure water heating boilers the MAWP shall be computed from the formula in subsection (5) of this section not exceeding 30 psi.

(3) For nonstandard cast iron low pressure steam heating boilers the MAWP shall not exceed 15 psi steam.

(4) For nonstandard cast iron low pressure water heating boilers the MAWP shall not exceed 30 psi.

(5) For boilers and unfired pressure vessels not listed above, where the original code of construction is unknown, the following formula will be used.

$$\frac{TS \times t \times E}{R \times FS} = MAWP$$

- TS = Tensile Strength in psi as given in ASME Code, when material cannot be identified use 55,000 for steel and 45,000 for wrought iron.
- t = thickness in inches of the thinnest part determined by actual measurement.
- E = efficiency of longitudinal joint or ligament, whichever is the least, determined by the rules and formula in the ASME Code. When construction methods are not known welded joint efficiency will be 70%.
- R = radius of largest course in inches.
- FS = Factor of Safety, for boilers shall be a minimum of 5. For boilers with a longitudinal lap seam it shall be a minimum 8. Boilers with a longitudinal lap seam, unless granted a special permit, may only be used at a maximum of 15 psi provided they have passed inspection. The minimum for unfired pressure vessels shall be 4 when less than 20 years old, 4 1/2 when over 20 years old.

[Statutory Authority: Chapter 70.79 RCW. 04-21-069, § 296-104-405, filed 10/19/04, effective 1/1/05. Statutory Authority: RCW 70.79.030, 70.79.040, 70.79.150, 70.79.290, 70.79.330, 70.79.350, and chapter 70.79 RCW. 04-01-194, § 296-104-405, filed 12/24/03, effective 1/24/04. Statutory Authority: RCW 70.79.030 and 70.79.040. 98-22-024, § 296-104-405, filed 10/28/98, effective 11/28/98; 97-20-109, § 296-104-405, filed 9/30/97, effective 10/31/97; Part VI, § 2, filed 3/23/60.]

296-104-502

Repairs – What are the requirements for nonnuclear boilers and unfired pressure vessel repairs and alterations?

Repairs and alterations to nonnuclear boilers and pressure vessels shall be made in accordance with the rules of the National Board Inspection Code (NBIC) as adopted in WAC [296-104-102](#). Additionally, repairs and alterations to nonstandard boilers and pressure vessels, as addressed in WAC [296-104-215](#), must be authorized by the chief inspector.

Repairs and alterations may be made by an organization authorized by the jurisdiction and in possession of a valid Certificate of Authorization for use of the "R" symbol stamp, issued by the National Board provided such repairs/alterations are within the scope of the authorization.

Owner/user special inspectors may only accept repairs and alterations to boilers and unfired pressure vessels operated by their respective companies per RCW 70.79.130.

Documentation of repairs and alterations, in accordance with the requirements of the National Board Inspection Code (NBIC) as adopted in WAC [296-104-102](#), shall be submitted to the department.

[Statutory Authority: Chapter 70.79 RCW. 04-21-069, § 296-104-502, filed 10/19/04, effective 1/1/05. Statutory Authority: RCW 70.79.030, 70.79.040, 70.79.150, 70.79.290, 70.79.330, 70.79.350, and chapter 70.79 RCW. 02-23-036, § 296-104-502, filed 11/13/02, effective 12/14/02; 01-24-061, § 296-104-502, filed 11/30/01, effective 12/31/01. Statutory Authority: RCW 70.79.030, 70.79.040 and chapter 70.79 RCW. 00-21-024, § 296-104-502, filed 10/10/00, effective 11/13/00. Statutory Authority: RCW 70.79.030 and 70.79.040. 99-22-026, § 296-104-502, filed 10/26/99, effective 11/26/99; 98-22-024, § 296-104-502, filed 10/28/98, effective 11/28/98. Statutory Authority: RCW 70.79.040. 94-21-002, § 296-104-502, filed 10/5/94, effective 11/5/94.]

296-104-510

Repairs – When a lap seam crack is discovered along a riveted longitudinal joint on a boiler or unfired pressure vessel, what action is required and what repairs are allowed?

A "lap seam crack" is a crack found in a riveted lap seam, extending parallel to the longitudinal joint and located either between or adjacent to rivet holes. Repairs to a "lap seam crack" on a shell or drum of any boiler or unfired pressure vessel is not allowed. The shell or drum of any boiler or unfired pressure vessel in which a lap seam crack is discovered shall be immediately discontinued from use.

[Statutory Authority: RCW 70.79.030, 70.79.040, 70.79.150, 70.79.290, 70.79.330, 70.79.350, and chapter 70.79 RCW. 04-01-194, § 296-104-510, filed 12/24/03, effective 1/24/04. Statutory Authority: RCW 70.79.030 and 70.79.040. 98-22-024, § 296-104-510, filed 10/28/98, effective 11/28/98; Part VII, § 3, filed 3/23/60.]

296-104-515

Repairs – Do riveted repairs to boilers and unfired pressure vessels require prior approval?

Yes, riveted repairs to boilers and unfired pressure vessels requires prior approval by the chief inspector.

[Statutory Authority: RCW 70.79.030, 70.79.040, 70.79.150, 70.79.290, 70.79.330, 70.79.350, and chapter 70.79 RCW. 04-01-194, § 296-104-515, filed 12/24/03, effective 1/24/04. Statutory Authority: RCW 70.79.030 and 70.79.040. 98-22-024, § 296-104-515, filed 10/28/98, effective 11/28/98. Statutory Authority: RCW 70.79.030. 86-04-059 (Order 86-01), § 296-104-515, filed 2/4/86. Statutory Authority: RCW 70.79.030 and 70.79.330. 84-21-012 (Order 84-20), § 296-104-515, filed 10/5/84; Part VII, § 4, filed 3/23/60.]

296-104-520

Repairs – What are the requirements for repair of nonnuclear safety devices?

The resetting, repairing, and restamping of safety valves and relief valves shall be done by a qualified manufacturer or valve repair organization holding a valid "V," "UV," or "VR" Certificate of Authorization issued by the National Board of Boiler and Pressure Vessel Inspectors. Section IV safety valves shall be repaired only by the valve manufacturer.

Boiler and pressure vessel users, however, may authorize external adjustments to be made to bring their installed safety valves and relief valves, except Section IV safety valves, back to the stamped set pressure when performed by the user's trained, qualified, regular, and full-time employee or this adjustment shall be witnessed and approved by a National Board Commissioned Inspector. Refer to Appendix "J" of the National Board Inspection Code as referenced in WAC [296-104-102](#) for guidelines in training and qualifying user employees. All such external adjustments shall be resealed showing the identification of the organization making the adjustments and the date.

Repairing of noncode relief or safety valves shall not be allowed, except as specified below. Noncode liquid relief valves installed prior to 1-1-85 shall be repaired by an organization holding a valid "V," "UV," or "VR" Certificate of Authorization, but need not be stamped.

[Statutory Authority: Chapter 70.79 RCW. 04-21-069, § 296-104-520, filed 10/19/04, effective 1/1/05. Statutory Authority: RCW 70.79.030, 70.79.040, 70.79.150, 70.79.290, 70.79.330, 70.79.350, and chapter 70.79 RCW. 04-01-194, § 296-104-520, filed 12/24/03, effective 1/24/04. Statutory Authority: RCW 70.79.030 and 70.79.040. 98-22-024, § 296-104-520, filed 10/28/98, effective 11/28/98; Part VII, § 5, filed 3/23/60.]

296-104-535

Repairs – What are the requirements for nuclear repairs/replacement?

(1) Repairs/replacement to all nuclear components, appurtenances, and their supports shall conform to the rules contained in the ASME Section XI Code. The ASME Section XI Code edition and addenda shall be as specified in the owner in-service inspection program plan.

(2) Where a repair/replacement is performed, a report as required by ASME Section XI Code, signed by the owner and the Authorized Nuclear In-service Inspector (ANII) shall be submitted to the jurisdiction.

[Statutory Authority: RCW 70.79.030 and 70.79.040. 98-22-024, § 296-104-535, filed 10/28/98, effective 11/28/98.]

296-104-540

Repairs – What are the requirements for nuclear repairs of safety devices?

All nuclear components shall be safe-guarded by safety devices, as specified in the ASME Section III Code.

(1) The resetting, repair, and restamping of these safety devices shall be performed only by organizations holding a valid ASME "N" Certificate of Authorization to repair ASME Section III Code safety devices.

(2) Nuclear plant owners with an approved ASME Section XI program, may authorize resetting, repairing or replacement of their safety devices.

(3) Resetting, repairing or replacement activities shall be witnessed and approved by an inspector, with appropriate National Board endorsements.

(4) All repaired safety devices shall be resealed showing the identification of the organization making the repair and the date.

[Statutory Authority: RCW 70.79.030 and 70.79.040. 98-22-024, § 296-104-540, filed 10/28/98, effective 11/28/98.]

296-104-700

What are the inspection fees – Examination fees – Certificate fees – Expenses?

The following fees shall be paid by, or on behalf of, the owner or user upon the completion of the inspection. The inspection fees apply to inspections made by inspectors employed by the state.

Heating boilers:	Internal	External
Cast iron -- All sizes	\$32.00	\$25.60
All other boilers less than 500 sq. ft.	\$38.60	\$25.60
500 sq. ft. to 2500 sq. ft.	\$63.70	\$32.00
Each additional 2500 sq. ft. of total heating surface, or any portion thereof	\$25.60	\$12.60
Power boilers:	Internal	External
Less than 100 sq. ft.	\$32.00	\$25.60
100 sq. ft. to less than 500 sq. ft.	\$38.60	\$25.60
500 sq. ft. to 2500 sq. ft.	\$63.70	\$32.00
Each additional 2500 sq. ft. of total heating surface, or any portion thereof	\$25.60	\$12.60
Pressure vessels:		
Automatic utility hot water supply heaters per RCW 70.79.090		\$6.00
All other pressure vessels:		
Square feet shall be determined by multiplying the length of the shell by its diameter.		
	Internal	External
Less than 15 sq. ft.	\$25.60	\$19.10
15 sq. ft. to less than 50 sq. ft.	\$38.00	\$19.10

50 sq. ft. to 100 sq. ft.	\$44.20	\$25.60
For each additional 100 sq. ft. or any portion thereof	\$44.20	\$12.60

Certificate of inspection fees: For objects inspected, the certificate of inspection fee is \$19.10 per object.

Boiler and pressure vessel installation/reinstallation permit (excludes inspection and certificate of inspection fee)	\$50.00
---	---------

Nonnuclear shop inspections, field construction inspections, and special inspection services:

For each hour or part of an hour up to 8 hours	\$38.60
--	---------

For each hour or part of an hour in excess of 8 hours	\$57.70
---	---------

Nuclear shop inspections, nuclear field construction inspections, and nuclear triennial shop survey and audit:

For each hour or part of an hour up to 8 hours	\$57.70
--	---------

For each hour or part of an hour in excess of 8 hours	\$90.10
---	---------

Nonnuclear triennial shop survey and audit:

When state is authorized inspection agency:

For each hour or part of an hour up to 8 hours	\$38.60
--	---------

For each hour or part of an hour in excess of 8 hours	\$57.70
---	---------

When insurance company is authorized inspection agency:

For each hour or part of an hour up to 8 hours	\$57.70
--	---------

For each hour or part of an hour in excess of 8 hours	\$90.10
---	---------

Examination fee: A fee of \$71.30 will be charged for each applicant sitting for an inspection examination(s).

Special inspector commission: An initial fee of \$25 and an annual renewal fee of \$10 along with an annual work card fee of \$15.

Expenses shall include:

Travel time and mileage: The department shall charge for its inspectors' travel time from their offices to the inspection sites and return. The travel time shall be charged for at the same rate as that for the inspection, audit, or survey. The department shall also charge the current Washington office of financial management accepted mileage cost fees or the actual cost of purchased transportation. Hotel and meals: Actual cost not to exceed the office of financial management approved rate.

Washington state specials: For each vessel to be considered by the board for a Washington state special certificate, a fee of \$358.00 must be paid to the department before the board meets to consider the vessel. The board may, at its discretion, prorate the fee when a number of vessels that are essentially the same are to be considered.

[Statutory Authority: RCW 70.79.030, 70.79.040, 70.79.150, 70.79.290, 70.79.330, and 70.79.350. 06-12-032, § 296-104-700, filed 5/31/06, effective 7/1/06; 05-12-028, § 296-104-700, filed 5/24/05, effective 6/30/05. Statutory Authority: Chapter 70.79 RCW. 04-21-069, § 296-104-700, filed 10/19/04, effective 1/1/05; 04-13-044, § 296-104-700, filed 6/10/04, effective 6/30/04. Statutory Authority: RCW 70.79.030, 70.79.040, 70.79.150, 70.79.290, 70.79.330, 70.79.350, and chapter 70.79 RCW. 04-01-194, § 296-104-700, filed 12/24/03, effective 1/24/04; 03-12-051, § 296-104-700, filed 5/30/03, effective 6/30/03; 02-23-036, § 296-104-700, filed 11/13/02, effective 12/14/02; 02-12-021, § 296-104-700, filed 5/28/02, effective 6/28/02; 01-24-061, § 296-104-700, filed 11/30/01, effective 12/31/01; 01-12-034, § 296-104-700, filed 5/29/01, effective 6/29/01. Statutory Authority: RCW 70.79.030, 70.79.040 and chapter 70.79 RCW. 00-21-024, § 296-104-700, filed 10/10/00, effective 11/13/00. Statutory Authority: RCW 70.79.030 and 70.79.040. 99-08-049, § 296-104-700, filed 4/1/99, effective 5/2/99; 98-09-064, § 296-104-700, filed 4/20/98, effective 5/21/98. Statutory Authority: RCW 70.79.040. 93-12-014, § 296-104-700, filed 5/21/93, effective 6/21/93. Statutory Authority: RCW 70.79.030 and 70.79.330. 84-21-012 (Order 84-20), § 296-104-700, filed 10/5/84; 84-11-016 (Order 84-09), § 296-104-700, filed 5/10/84; 82-24-025 (Order 82-36), § 296-104-700, filed 11/23/82, effective 1/1/83; Order 77-23, § 296-104-700, filed 11/8/77; Emergency Order 77-22, § 296-104-700, filed 11/8/77.]

296-104-701

What are the civil penalties?

(1) An owner, user, or operator of a boiler or pressure vessel that violates a provision of chapter 70.79 RCW, or of the rules adopted under that chapter, is liable for a civil penalty based on the following schedule.

Operating under pressure a boiler or pressure vessel which the department has condemned has issued a red tag or has suspended the inspection certificate:

First offense	\$150.00
Second offense	\$300.00
Each additional offense	\$500.00

Each day of such unlawful operation shall be deemed a separate offense.

Operating under pressure a boiler or pressure vessel without a valid inspection certificate:

First offense	\$50.00
Second offense	\$100.00
Each additional offense	\$200.00

Each day of such unlawful operation shall be deemed a separate offense.

Installation of a boiler or pressure vessel without meeting prior filing requirements of WAC [296-104-020](#):

First offense	\$100.00
Second offense	\$200.00
Each additional offense	\$500.00

Performing a repair to a boiler or pressure vessel, involving welding to a pressure retaining part, without meeting requirements of WAC [296-104-502](#):

First offense	\$150.00
Second offense	\$300.00
Each additional offense	\$500.00

Performing an alteration to a boiler or pressure vessel without meeting requirements of WAC [296-104-502](#):

First offense	\$150.00
Second offense	\$300.00
Each additional offense	\$500.00

Performing resetting, repair or restamping of safety valves, safety relief valves, or rupture discs, without meeting requirements of WAC [296-104-520](#):

First offense	\$150.00
Second offense	\$300.00
Each additional offense	\$500.00

Failure of owner to notify chief inspector in case of accident which serves to render a boiler or unfired pressure vessel inoperative, as required by WAC [296-104-025](#):

Each offense	\$100.00
------------------------	----------

Failure to comply with a noncompliance report requirement:

Within 90 days	\$100.00
Within 91-180 days	\$250.00
Within 181-270 days	\$400.00
Within 271-360 days	\$500.00

(2) The inspection agency responsible for the in-service inspection of a boiler or unfired pressure vessel that violates a provision of chapter 296-104 WAC, or the rules adopted under that chapter, is liable for a civil penalty based on the following schedule.

Failure to file a report of inspection per WAC [296-104-040](#):

Each offense	\$50.00
------------------------	---------

Failure to apply a state serial number per WAC [296-104-140](#):

Each offense	\$50.00
------------------------	---------

Failure to attach a "Red TAG" per WAC [296-104-110](#):

Each offense	\$50.00
------------------------	---------

Each object (boiler or unfired pressure vessel) is considered a separate offense.

(3) The department shall by certified mail notify a person of its determination that the person has violated this section.

(4) Any person aggrieved by an order or act under the boiler and unfired pressure vessels law or under the rules and regulations may appeal to the board of boiler rules. This appeal shall be filed within twenty days after service of the notice of the penalty to the assessed party by filing a written notice of appeal with the chief boiler inspector per RCW 70.79.361.

(5) Each day that a violation occurs will be a separate offense. A violation will be a second or additional offense only if it occurs within one year from the first violation.

[Statutory Authority: RCW 70.79.030, 70.79.040, 70.79.150, 70.79.290, 70.79.330, and 70.79.350. 05-22-092, § 296-104-701, filed 11/1/05, effective 1/1/06. Statutory Authority: Chapter 70.79 RCW. 04-21-069, § 296-104-701, filed 10/19/04, effective 1/1/05. Statutory Authority: RCW 70.79.030, 70.79.040 and chapter 70.79 RCW. 00-21-024, § 296-104-701, filed 10/10/00, effective 11/13/00. Statutory Authority: Chapter 70.79 RCW. 87-12-003 (Order 87-10), § 296-104-701, filed 5/21/87.]



BOILER / PRESSURE VESSEL INSTALLATION OR REINSTALLATION PERMIT

<http://www.lni.wa.gov/TradesLicensing/Boilers>

1 Permit per Object
PERMIT NUMBER:

INSTALLER/CONTRACTOR/OWNER				
Complete all fields in this box to the installer's name and signature				
Installer / Contractor		Owner / Billing Location		Object Location
Name		Name		Name
Street		Street		Street
City, State, Zip		City, State, Zip		City, State, Zip
Contact Name		Contact Name		Contact Name
Phone		Phone		Phone
Fax		Fax		Fax
E-mail		E-mail		E-mail
Specific Object Location:			Type of Object:	
Verify minimum clearance per WAC 296-104-255, 256, 260, 265, 271		Initials	Verify CSD-1 requirements are met WAC 296-104-302 & 303 (1).	
			Initials	
To purchase a copy of ASME CSD-1 2002 Control and Safety Devices for Automatically Fired Boilers, go to www.asme.org , and type CSD-1 in the search field.				
PV or Boiler	NB Number	Serial / Other Number		ASME Stamp
Manufacturer		Year Built		
MAWP	Vessel Size (Sq Ft / HS)	Number of SV	SV press	SV press 2
I certify that the work to be performed under this notification will be done in accordance with the Boiler and Unfired Pressure Vessels Law RCW 70.79 and WAC 296-Chapter 104.				Contractor Registration Number
Date	Installer name		Installer Signature	

INSPECTOR – Complete this section Boiler/Pressure Vessel Information			
Jurisdiction #	Date of Inspect	Inspection Type	Issue Cert
Date	Inspector's Name		Inspector's Signature
For L&I use Only:	Permission is hereby given to do the above work, subject to compliance with the Boilers and Unfired Pressure Vessels Law RCW 70.79 and WAC 296-Chapter 104.		
Date Permit Issued	Expiration Date	Signature of Chief Boiler/Pressure Vessel Inspector	

NOTE: The Owner is responsible for notifying Labor and Industries at (360) 902-5272 & 5273 & 5267 when inspections are needed. All inspection costs and fees will be the responsibility of the Owner.

THIS NOTICE SHALL BE POSTED BY THE VESSEL

**INSTRUCTIONS FOR THE PREPARATION OF
F620-032-000, BOILER/PRESSURE VESSEL INSTALLATION OR
REINSTALLATION PERMIT**

***INSTALLER/CONTRACTOR/OWNER fills in ALL FIELDS in the
bolded box area.***

***If any of the fields in the bolded box area are left blank, the permit
will be rejected and returned to the submitter.***

NOTE: Installer/Contractor/Owner may be the same person.

- One permit per object. One permit for each boiler/pressure vessel.
- Complete all information for:
 - Installer/Contractor
 - Owner/Billing Location
 - Object Location
- “Specific Object Location” i.e.: hall closet east wing, room 123, ceiling over desk in conference room, janitors closet, boiler room building 2, etc. DO NOT put: new school, basement, gym, second floor etc. The Inspector needs to know exactly where the object is installed.
- “Type of Object” i.e.: boiler, air tank, water heater, heat exchanger, co2 tank, storage tank, expansion tank, etc.
- You must verify compliance with clearances and CSD-1 requirements by initialing the blocks.
- “Contractor Registration Number” MUST BE ENTERED.
- Date permit submitted to L & I
- Print Installer/Owner name
- Please sign form and either mail or fax to address/phone number on form.

If you have any additional suggestions please contact us:

Linda Williamson	360-902-5270	wiln235@lni.wa.gov
Tony Oda	360-902-4983	odaa235@lni.wa.gov



INCIDENT REPORT BOILER OR PRESSURE VESSEL

Incident # _____

Type of Vessel		Date of incident
Name of business		Type of business
Address of business		
Contact Name	Phone	FAX
Vessel Manufacturer		Year built
National Board #	S/N	Jurisdiction #

MAWP _____ @ _____ F deg Operating Pressure _____

Certificate expiration date _____ Certificate on site? ☐ Yes ☐ No

Type of Incident	
Primary Cause	
Injuries/Fatalities?	Property damage?
Were previous repairs/alterations made? <input type="checkbox"/> Yes <input type="checkbox"/> No	Copy of "R-1, R-2" form available? <input type="checkbox"/> Yes <input type="checkbox"/> No

Were previous violations reported? ☐ Yes ☐ No

Incident Summary (Provide detailed summary with any drawings, pictures, witness statements, etc.)
Attach additional documentation as necessary.

--

Submitted by	National Board Commission
Affiliation	

Department of Labor and Industries
Boiler Section
PO Box 44410
Olympia WA 98504-4410
PHONE (360) 902-5270 FAX (360) 902-5292
<http://www.lni.wa.gov/TradesLicensing/Boilers>



RENTAL BOILER OPERATING PERMIT GOOD AT THIS LOCATION ONLY

PERMIT NUMBER

For L&I use Only: Permit Fee \$50.00
Inspection Fee

Boiler Rental Company

Name	Street	City, State, Zip	
Contact	FAX	Phone	E-mail

Rental Location (location of the boiler)	Street	City, State, Zip
Contact Name	Phone	Location Comments
Is rental location an insured location? <input type="checkbox"/> Yes <input type="checkbox"/> No	Insurance Company	
If "yes" has insurance inspector/company been notified? <input type="checkbox"/> Yes <input type="checkbox"/> No	Inspector contacted	

Rental Boiler Information

ASME CSD-1 REQUIREMENTS SEE WAC 296-104-200 & 296-104-265 (3)					
State ID#	NB#	Certificate expiration Date	Approximate length of rental		
Manufacturer	Use	Type of Vessel	MAWP	System Pressure	
BTU/KW Input	Fuel	Safety Valve Set Pressure	Safety Valve Capacity		
Date	Print name	Installer Signature			

For L&I use Only:	Permission is hereby given to do the above work, subject to compliance with the Boilers and Unfired Pressure Vessels Law RCW 70.79 and WAC 296-Chapter 104.	
Date Permit Issued	Expiration Date	Signature of Chief Boiler/Pressure Vessel Inspector

Commissioned Inspector: An operational inspection was performed and found satisfactory

Name	WA State Commission Number	Date	Signature

Warning: The Owner is responsible for notifying Labor and Industries at (360) 902-5272 & 5273 when inspections are needed. All inspection costs and fees will be the responsibility of the Owner.

THIS NOTICE SHALL BE POSTED BY THE VESSEL

Department of Labor and Industries
 Boiler Section
 PO Box 44410
 Olympia WA 98504-4410
 360-902-5270



NON-COMPLIANCE REPORT

Boiler & Pressure Vessel Inspection

State number	Valid certificate posted <input type="checkbox"/> Yes <input type="checkbox"/> No		Date to be completed by	Type of inspection <input type="checkbox"/> INT <input type="checkbox"/> EXT
Owner's name		User's name		
Address		Address		
City	State	ZIP	City	State ZIP
Contact Name and Phone No.		Contact Name and Phone No.		
NB or other number		Location in plant		
Manufacturer's name		Yr mfg	Type of Vessel	
Is condition of object such that permit should be suspended? <input type="checkbox"/> Yes <input type="checkbox"/> No (If no, explain fully below)				
Non-Conforming Condition:				
Corrective Action:				
Comments:				
Object may be red-tagged as "Unsafe-Do Not Use" and the required certificate will not be issued/ or will be suspended until the proper corrective action has been completed and verified by the inspector (per WAC 296-104-110).				
Inspector's Name: (Please print)		Inspector's Phone Number:		
Date:	Inspectors Washington Commission Number:	Signature:		

***On completion of requirements please notify inspector for
reinspection.***

(Please refer to State Number for reinspection).

Department of Labor and Industries
 Boiler Section
 PO Box 44410
 Olympia WA 98504-4410
 PHONE (360) 902-5270 FAX (360) 902-5292
<http://www.lni.wa.gov/TradesLicensing/Boilers>



BOILER/PRESSURE VESSEL VARIANCE REQUEST

Owner/Agent			Date
Contact Name		Address	
Telephone	FAX		
Email		State number	
Location of Boiler/Pressure Vessel if different from Owner/Agent's address			

Type of variance ☐ Boiler ☐ Pressure Vessel

Description of Requested Variance

--

Diagram/Photo of Installation

(Must provide actual dimensions for variances regarding clearance)

Attach additional pages if required

--

<input type="checkbox"/> Owner/Agent	<input type="checkbox"/> Approve	<input type="checkbox"/> Disapprove	Signature
--------------------------------------	----------------------------------	-------------------------------------	-----------

Reviewer	Recommendation	Signature
<input type="checkbox"/> Boiler Inspector	<input type="checkbox"/> Approve <input type="checkbox"/> Approve with modifications <input type="checkbox"/> Disapprove	
<input type="checkbox"/> Chief Boiler Inspector	<input type="checkbox"/> Approve <input type="checkbox"/> Approve with modifications <input type="checkbox"/> Disapprove	
Comments		

Department of Labor and Industries
Boiler/Unfired Pressure Vessel Section
P.O. Box 44410
Olympia, WA 98504-4410